



Università
Ca' Foscari
Venezia

Master Degree program

in Scienze del Linguaggio

Glottodidattica

Second Cycle (D.M. 270/2004)

Final Thesis

—
Ca' Foscari
Dorsoduro 3246
30123 Venezia

Deaf university students and students with language and reading impairments in the foreign language curriculum

Supervisor

Ch. Prof.ssa Giulia Bencini

Assistant supervisor

Ch. Prof.ssa Anna Cardinaletti

Graduand

Chiara Mazza

Matriculation Number 855588

Academic Year

2015 / 2016

TABLE OF CONTENTS

Introduction	p. 1
CHAPTER 1 – “Students with disabilities and education”	p. 5
CHAPTER 2 – “University students with dyslexia in the English as a second language classroom”	p. 10
2.1 Dyslexic students in the classroom: What are the challenges?	p. 11
2.2 Dyslexic students and university	p. 14
2.2.1 Socioemotional aspects of dyslexia	p. 17
2.2.2 Dyslexic students in the Italian university setting	p. 18
2.3 LD students and foreign language learning	p. 20
2.4 Foreign language choice	p. 21
2.5 L2 Immersion for LD students	p. 21
2.6 LD students and English language learning	p. 22
CHAPTER 3 - “Dyslexic students. Data analysis and results”	p. 24
3.1 Qualitative analysis	p. 25
3.2 Data analysis and results	p. 43
3.3 Discussion	p. 49
CHAPTER 4 - “Deaf college students in the foreign language curriculum”	p. 51
4.1 Oralism and Manualism in Italy: a brief survey of different approaches	p. 53

4.1.1 History of the methods	p. 54
4.1.2 Current approaches	p. 56
4.2 Typical issues in language acquisition	p. 57
4.3 Toward an inclusive classroom	p. 58
4.4 Cochlear Implants	p. 59
4.5 Written language	p. 61
4.6 Deafness and foreign languages	p. 63
4.6.1 A new proposal	p. 65

CHAPTER 5 - “Deaf students. Data analysis and results” p. 66

5.1 Qualitative analysis	p. 68
5.2 Data analysis and results	p. 86
5.3 M's case	p. 97
5.4 Discussion	p. 99

Conclusion p. 101

7.1. Dyslexic students	p. 102
7.1.1 Findings	p.102
7.1.2 Recommendations	p. 103
7.2 Deaf students	p. 103
7.2.1 Findings	p. 103
7.2.2 Recommendations	p.105
7.3 Limitations	p. 105
7.4 Further directions	p. 105

References p. 107

APPENDIX A p. 116

APPENDIX B p. 125

APPENDIX C p. 132

INTRODUCTION

The following work provides an overview of some of the experiences that students with language learning difficulties, such as dyslexia and deaf students face within the foreign language curriculum at university. Our focus will be to highlight merits and drawbacks of post-secondary English as a second language courses, for students with dyslexia and students who are deaf

The reason why I decided to write my thesis about this topic is mainly my deep interest in English language teaching, especially with students with special needs. This interest of mine has been nurtured during my whole University path through several English teaching experiences and internships, which led me to deal with different impairments, especially dyslexia and hearing loss. Moreover, I observed that there is a big gap in literature as far as second language learning for deaf Italian students is concerned. This study attempt to

begin to fill it. For all these reasons, I chose to settle for a research work, which would give me the possibility to find out new guidelines and prove old theories on my own.

The thesis is divided into two parts: the first part will revolve around language impaired student observations and evaluations of university language courses, whereas the second part will handle deaf students conditions.

Dyslexic students

Dyslexic students experience even more difficulties in language learning than their normal peers. As a matter of facts the reading and writing problems that they encounter in their own language reflects in the study of the second one. In a world where the English language is a fundamental requirement for either finding a job or barely making oneself understood outside of one's country, it is crucial for dyslexic students to find a way to cope with their impairment and succeed in language learning.

Because English has an orthographic system which is on the extreme end of the opacity continuum this may represent an additional challenge for LD students, especially at the university level. This work is meant to give an overview of the strategies and the support system dyslexic language learners at post-secondary level adopt to overcome their problems in preparing for English language exams.

To do this, we created a 25 questions questionnaire and we presented it to a group of dyslexic students who attended university in Italy. To build it up and spread it out, we employed the online platform Google Forms and a very popular social network. The questionnaire is made up of two sections: one about the experience of the interviewees during English exams at university (focusing on how they deal with English as a second language courses) and one about their life and their foreign language skills in general.

Our 25 open and closed questions (especially multiple choices and linear scales) have been developed in order to answer to the following research questions:

- When is it better to diagnose dyslexia in a student, in order to facilitate his or her study path?
- What aid suits better the purpose to help university language impaired students during English exams?
- Which of the possible coping measures help mostly the process of English language learning when undertaken during dyslexics' study path?
- Which study method is more efficient for language impaired students who need to prepare an English as a second language exam?
- Which emotional or technical issue, directly linked to dyslexia, affects mostly the English exam outcome?

Deaf students

All students must be provided with various linguistic competences in order to be given the chances to be included with all the different aspects of our society. With the increasing importance of English language learning in education, a great challenge has recently been posed to English language instructors, allowing deaf students to take part in English as a second language classes. In the following work, we will outline deaf students situation in Italian Universities and we will try to suggest possible improvements to English as a second language programs in order to meet hearing impaired young adults' needs.

In order to investigate this topic, I developed a questionnaire and submitted it to a group of deaf people who attended university in Italy. To do that we employed the online platform Google Forms, thanks to which we have been able to put together 23 questions, both open and

close (especially multiple choices and linear scales). The questionnaire is made up of two sections: one about the general college experience of the interviewees (focusing on how they deal with English as a second language courses) and one more personal, about their life and their foreign language skills. The questionnaire was later posted on a popular social network and was filled in by 15 deaf post-secondary students.

Our 23 questions have been developed in order to find an answer to the following research questions:

- Does Italian sign language interfere with Italian production or Italian lip-reading skills?
- Is the number of sign languages learnt related to the hearing loss age? Is it related to the age in which deaf people learn LIS?
- Do deaf people who attend a master degree know and use the Italian sign language?
- Following which aids do deaf students reach a master degree?
- What aid works best in deaf second language teaching?
- Is the learning of a second language facilitated from a good language sign competence?

CHAPTER 1: STUDENTS WITH DISABILITIES AND EDUCATION

People with disabilities are underrepresented among the professions. The number of teachers, medical doctors, architects and University professors who have a disability is lower in Italy than in other European countries. Even though the data on the subject is very limited, disabled appear to be more likely to be unemployed than their able peers in Italy. The last report by Istituto Nazionale di Statistica

Figure 1: Employment of people over 15 year old with different disabilities (percentile)

PROFESSIONALE	vista, udito e parola	nel movimento	nelle funzioni	Due difficoltà	Tre difficoltà
Occupato	16,3	5,0	1,5	1,3	0,5
In cerca di occupazione	4,3	1,2	0,7	0,2	0,1
Casalinga	20,9	26,3	24,0	17,9	10,0
Ritirato dal lavoro	41,4	44,5	49,2	42,6	42,5
Inabile al lavoro	8,1	14,3	14,2	28,4	35,5
Altra condizione professionale	8,9	8,7	10,5	9,6	11,4
Totale	100,0	100,0	100,0	100,0	100,0

*Fonte: Istat, Indagine multiscopo "Condizioni di salute e ricorso ai servizi sanitari - Anni 2004-2005"
(a) Cfr. nota 4 cap. 1 pag. 21 .*

(ISTAT) goes back to over a decade ago. According to these data, 23% of people with disabilities are employed in Italy, a pattern that follows

the European one, which counts a disabled employment rate of 20% (Eurostat).

If we look at the employment data broken down by gender, there is a large disparity between employment levels for males vs. females. For males with a disability the employment rate is 29% whereas it is 11% for females. As shown from the ISTAT data regarding employment rates for people without a disability, it appears clear that disabilities influence negatively the employment rate of men and women in Italy. As a matter of facts, impaired males are a little more than twice more likely to be unemployed whereas women are about four times more likely to be left out from the job market.

Table 1: Italian employment rate broke by gender

	2004 (%)	2005 (%)
Males	69,7	69,7
Females	45,5	45,4
Total	57,6	57,5

This difficult employment picture depends strongly from the access to education that disabled were offered (or denied). As a matter of facts, workers learn how to do their work firstly at schools and in University, therefor; a rough education path may lead to unemployment.

Data from ISTAT provide a clear outline of students with disabilities and education in Italy. From elementary school "scuola elementare" up to "scuola secondaria di II grado" the number of children with disabilities in

classrooms appear to be nearly split in a half. The higher and more difficult is the grade, the fewer are the disabled enrolled.

Figure 2: Students with disabilities in different school grades. School year 2005-2006

ORDINE SCOLASTICO	Alunni con disabilità	% sul totale alunni
Materna	17.481	1,1
Elementare	67.755	2,4
Secondaria di I grado	55.244	3,1
Secondaria di II grado	37.740	1,4
Totale	178.220	2,0

Fonte: Elaborazioni Istat su dati del Sistema informativo del Ministero della pubblica istruzione - Anno scolastico 2005-2006

(a) Cfr. nota 5.

Data regarding high school show a strong preference for students with disabilities to follow more applied or vocational types of high-schools, such as "Istruzione tecnica" or "Istruzione professionale".

Figure 3: Students with disabilities in high school. School year 2005-2006.

TIPO DI ISTRUZIONE	Valori assoluti	% sul totale alunni
Liceo classico	647	0,2
Liceo linguistico	79	0,5
Liceo scientifico	1.174	0,2
Istituto/Scuola magistrale	2.228	1,0
Istruzione classica, scientifica e magistrale	4.128	0,4
Istruzione tecnica	7.716	0,8
Istruzione professionale	22.532	4,1
Istituto d'arte	2.602	4,4
Liceo Artistico	673	1,5
Istruzione artistica	3.365	3,2
TOTALE SCUOLA SECONDARIA DI II GRADO	37.740	1,4

Fonte: Elaborazioni Istat su dati del Sistema informativo del Ministero della pubblica istruzione - Anno scolastico 2005-2006

This very contained enthusiasm for "Liceo classico, scientifico e magistrale" as well as "liceo artistico" leads to a worrying lack of

participation in University and postsecondary studies by disabled students.

Even if data of 2005-2006 are not available, it appears very clear that the number of students with disabilities enrolled in post-secondary (University) education in Italy is significantly lower than the number of disabled which come out from "scuola secondaria di secondo grado". What happens to those young people who do not select to pursue a University degree? One possibility is that they are more likely to not end up with full employment.

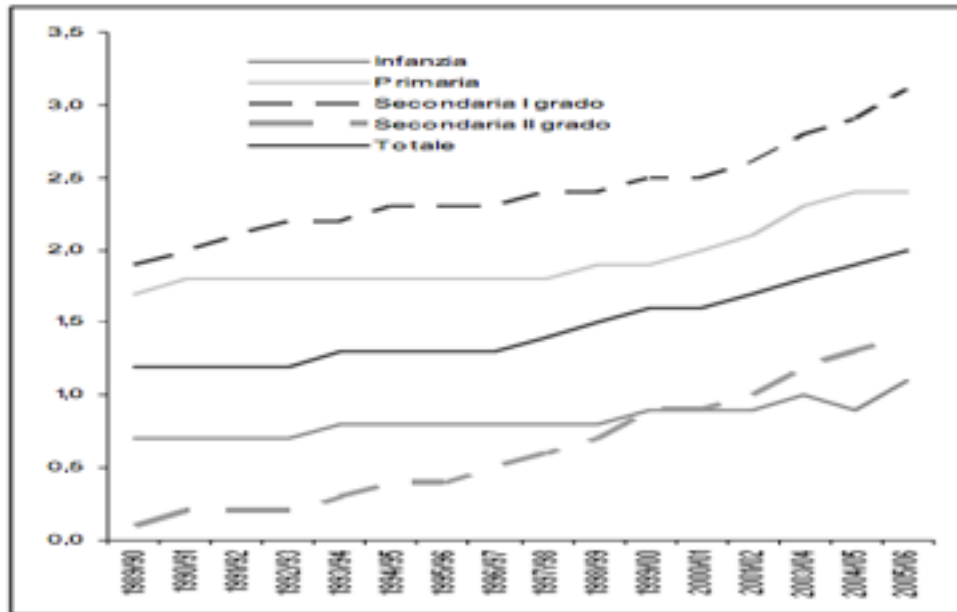
Figure 4: Students with disabilities in Italian Universities (absolute and percentile values).

TIPOLOGIA DI DISABILITÀ	Anno accademico				
	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
VALORI ASSOLUTI					
Cecità	537	567	677	713	764
Sordità	314	368	449	470	542
Dislessia	131	95	92	63	68
Disabilità motorie	1.724	1.837	2.302	2.601	2.814
Difficoltà mentali	144	134	207	249	290
Altro	1.963	2.946	3.253	3.970	4.656
Totale	4.813	5.947	6.980	8.066	9.134
VALORI PERCENTUALI					
Cecità	11,2	9,5	9,7	8,8	8,4
Sordità	6,5	6,2	6,4	5,8	5,9
Dislessia	2,7	1,6	1,3	0,8	0,7
Disabilità motorie	35,8	30,9	33,0	32,2	30,8
Difficoltà mentali	3,0	2,3	3,0	3,1	3,2
Altro	40,8	49,5	46,6	49,2	51,0
Totale	100,0	100,0	100,0	100,0	100,0

Fonte: Banca dati Cineca-Miur (Ministero dell'Istruzione, dell'Università e della ricerca - Consorzio interuniversitario)

More recent data from ISTAT show a trend towards an increasing number of students enrolled in private and state schools that the number of disabled students in private and public schools has been increasing in the last years. If this positive trend keeps on, we will testify a great increase in the number of disabled people in our school system.

Figure 5: Percentile values of students with disabilities / students without disabilities



Fonte: Elaborazioni Istat su dati del Sistema informativo del Ministero della pubblica istruzione

The aim of this thesis is to examine how the Italian school system, and specifically Italian Universities, are adapting to face the demands placed by the increasing number of students with disabilities and specific learning difficulties/impairments (SLD), specifically in regard to teaching methods, accommodations and adjustment of contents and new techniques.

Our analysis will be focused on students with dyslexia and students who have hearing impairments or are deaf. It will outline challenges they face in Italian university at the moment and will provide suggestions for the future of university education, especially as far as English as a language is concerned. The thesis focuses on English as a Second Language, because this the most frequent foreign language students are likely to take in in high-school and because some mastery of English is increasingly required for all students attending university in Italy.

CHAPTER 2:
UNIVERSITY STUDENTS WITH DYSLEXIA IN THE ENGLISH
AS A SECOND LANGUAGE CLASSROOM

Dyslexia is primarily a language-based learning impairment which manifests in reading difficulties such as inaccurate or slow and effortful word reading, poor decoding, and poor spelling skills, but also difficulties with spoken language comprehension and production. The focus of this chapter is to examine how students with a primary diagnosis of dyslexia cope in English Language courses at the University level in a typical Italian academic setting, with large classrooms.

Adequate English language proficiency is a desirable requirement for anyone who strives to take part in our society. Due to their language

impairment, dyslexic pupils may find it more challenging complex than their non-impaired peers to stay afloat in the foreign language classroom. As a matter of facts an even bigger challenge is presented to both dyslexic students and FL teachers by "factors such as poor phonological processing skills, weak short-term and working memory, word-finding difficulties, slower speed of processing, difficulties with auditory perception and discrimination and/or auditory sequencing problems, automaticity problems, difficulties with syntax and grammar" (Schneider & Crombie, 2003, p. 4) in addition to scarce motivation and frustration deriving from the linguistic difficulties that they encounter along the process of language learning. This is especially true if students are not offered any accommodation to help them cope with their impairment by educators, who are still not completely aware of the nature of dyslexia and the many aspects of language which may be affected and let them go unrecognized and unhelped. As noted by Shneider & Crombie (2003) indeed "training in accommodations for students with language processing difficulties has not been a routine part of teacher education in most foreign language teacher education programs" (p. 2) resulting not only in an increase in pupils' failure and therefore anxiety but also in a significant students' unawareness of their rights and available supporting system.

2.1 Dyslexic students in the classroom: What are the challenges?

The challenges that students with dyslexia face are often not limited to phonological awareness but tend to expand to production and comprehension of morphosyntactic information and syntactically complex sentences. Different studies highlighted how difficulties manifest in:

- verb agreement marking (Cantiani et al., 2013),
- past verb -ed marking (Joanisse et al., 2000),

- the understanding of passive sentences (Leikin & Assayag-Bouskila, 2004),
- relative clauses (Arosio et al., 2017)

Even though the connection between language and reading ability has by now been strongly established (Catts et al., 1999 & 2002), the nature of the relation is still poorly understood. There are different hypotheses concerning the link between language and reading skills:

- (1) *Grammatical limitations due to the lag in reading of dyslexic children in comparison to their normally developing peers:*

Dyslexics and normal readers differ in the amount of exposure they experience to reading. According to their deficit, dyslexic children find it very difficult to read and usually tend to avoid written texts. The lag of exposure to a high level of written language have a negative influence on vocabulary building, exposure to syntactically complex sentences such as passives and relative clauses.

- (2) *Grammatical limitations linked to the deficit underlying the reading disorder:*

One prominent account of developmental dyslexia is that it stems from a phonological deficit. According to several studies (e.g. Crain & Shankweiler, 1990, Smith et al, 1989), all symptoms experienced by dyslexic children –a poor grammar awareness for instance- are to be linked to their phonological deficit.

Other theories have been recently developed about a relation between development dyslexia and basic attentive processes (Facoetti, 2001).

(3) Grammatical limitations are not dependent of phonological limitations and interfere with reading acquisition.

According to Cardinaletti & Volpato (2015) a big challenge for university students with developmental dyslexia is also to face a formal register, both written and oral, during their course of post secondary study. Higher registers in every language usually present a much higher rate of complex syntactical structures indeed. Among all syntactic structures, the ones the two researchers have found to pose the most challenges for students with dyslexia are relative object clauses. Relative clauses are computationally more challenging than passive sentences because of their word order and surface structure which differs with respect to the computation work load required from the memory system to be interpreted (Cardinaletti & Volpato, 2015). As a matter of fact working memory deficit have been widely observed in people with dyslexia, hence, dyslexic students may experience difficulties in keeping linguistic information in mind to analyze, organize and reproduce it (Cornoldi, 1999). Because relative clauses involve long-distance syntactic dependencies, they appear to the eye of dyslexic kids much more puzzling than passive structures, made up by shorter sequences and dependencies. Cardinaletti & Volpato (2014) are consistently supported in their theory by many different researchers. Syntactic processing in relative clauses "have been shown to place varying demands on working memory capacity" (Wiseheart et al., 2009, p. 153). Gibson (1998) hypothesized that this depends on:

- An increment of distance between linguistic units that need to go together e.g., The man who I love lives in Milan.
- A recurring assignment of two different thematic to the same noun.

e.g. The man who loves me lives in Milan.

In both cases the noun (subject) presented at the beginning of the sentence needs to be stored in mind while being assigned with its new thematic or having completed its function, causing a heavier demand on the working memory of the reader.

All the challenges faced by dyslexic students have to be taken into consideration by English language instructors who have to prepare materials for written and oral exams. Impaired students must be put in the same position as any of their other normal peers. Certainly, adapting a language test in order to facilitate a certain group of students is no easy job, since teachers must pay attention not to alter the outcome of the exams.

Specific requirements will be carried out later in this work.

2.2 Dyslexic students and university

Currently, 99% of disabled students are enrolled in the Italian mainstream education system (D'Este & Ludbrook, 2013). The number of LD learners in university has been growing for the past ten to fifteen years. Recent poses have shown that the percentage of dyslexic students in Italian university has now reached the 10% out of the total amount of students enrolled in postsecondary studies (Dettori, 2015).

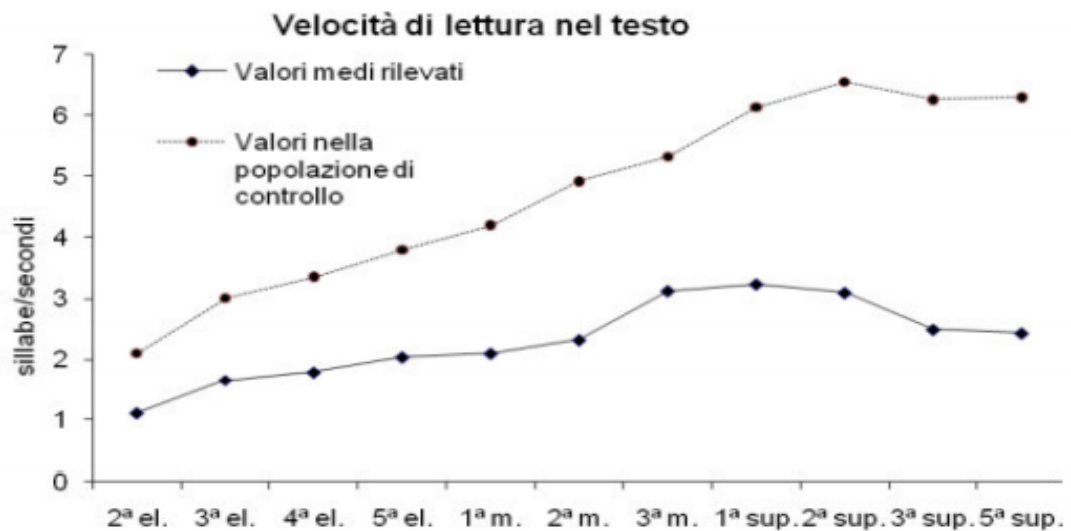
Dyslexic students at a postsecondary level can either arrive at university with a previous diagnosis or be diagnosed during their college years, although late evaluations can not differentiate between inadequate pre-reading experience, inadequate instruction, or both and constitutionally based cognitive deficit. As reported in Vellutino et al (1996) "this point is well articulated in a penetrating article by Clay (1987), who argued forcefully that the failure to control for the child's educational history is the major impediment to differential diagnosis of reading disability" (p. 601).

Furthermore, several intervention studies proved that a great number of impaired students could achieve at least grade-level reading skills if they receive an effective and early intervention to help them with their deficit (Clay, 1985; Iversen & Tunmer, 1993; Pinnell, 1989; Wasik & Slavin, 1993). As for Jamieson c. and Morgan E. (2008) "Students who already know that they are dyslexic before entering university are often at an advantage over those who have never benefited from a full assessment" (p. 17) due to the fact that they experienced a significant lower rate of failures in their studies and that they know how to access and effectively use different learning strategies. Very important for LD students assessed at an early stage is their usual awareness of their own strengths and weaknesses as an impaired individual, which have to be taken into great account while choosing a field of postsecondary studies. This doesn't mean impaired students should give up all literary and linguistic majors but, on the contrary, that LD students aware of their specific issues will make a more informed choice based on how successful they are in coping with their difficulties and overcoming the effects of dyslexia.

Interestingly enough, a recent study by Pizzoli et al. (2011) demonstrated that adolescents who have been diagnosed with dyslexia late (in their young adulthood) reported sense of shame and incompetence, whereas 48% of the people who have been diagnosed within primary school stated having experienced no problems, that they were supported adequately from both family and friends and that all of this helped them cop with thir impairment.

However, impaired students normally have to face persistent difficulties alongside their course of study. As shown in graph below (Stella, Savelli,

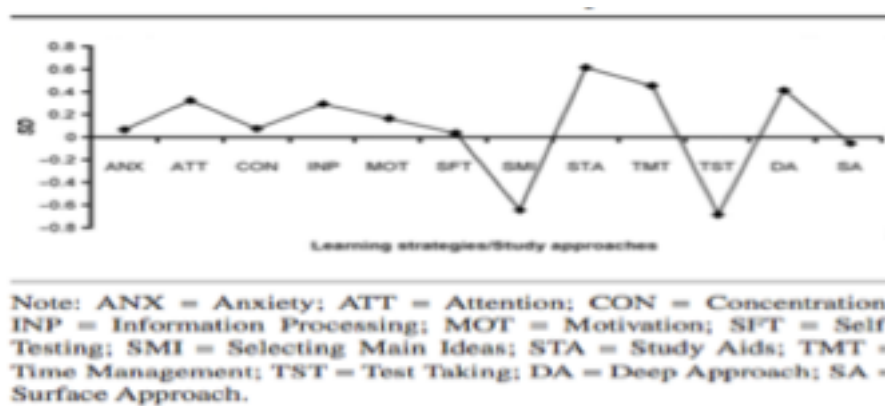
Figure 6: Reading speed in dyslexics and non-dyslexics students



Scorza, & Morlini, 2009) the speed rate of syllable per second of impaired students remains lower than the one of their normal peers throughout their whole life. Moreover, according to Jamieson & Morgan. (2008), dyslexic students "who are able to race through texts are likely to make a large number of errors and to overlook much detail; those rare dyslexic students whose oral prose reading is accurate, normally read very slowly indeed" (p.35). In a university environment, where most of the learning occurs through reading, LD students who are aware of how to cop with their weaknesses are obviously advantaged compared to the ones who have just recently being diagnosed.

As shown in the second graph (Kirby et al., 2008), the differences in study approaches and strategies between dyslexic students and their normal peers are mostly related to Time Management strategies and Study Aids. According to the researchers, this is a consequence either of higher difficulty of the word-level or of the

Figure 7: Learning strategies and study approaches profile of postsecondary students with dyslexia, expressed in standard deviation units of students without dyslexia.



focus on these strategies in support programs for dyslexic students. In figure 2, the means of the group with dyslexia are shown in terms of the number of standard deviation units they are above or below the means of the group without dyslexia.

2.2.1 Socioemotional aspects of Dyslexia

As for Ghisi et al. (2016), dyslexic people may present “psychological and psychopathological issues such as low self-esteem, poor resilience, and symptoms of depression and anxiety” (p.1). They could also manifest “social problems and emotional issues, as well as low academic and social self-efficacy” (p.2).

Ghisi's et al (2016) findings reported especially that dyslexic students in universities could take advantage from psychological interventions more than their non-impaired peers.

It has been demonstrated that taking longer in reading and writing in academic situations even when compensated (Hatcher et al, 2002), may result in the development of various psychopathologies (Mugnaini et al., 2009) in dyslexic adolescents and young adults. Dyslexia has often been correlated to psychological disorders (Undheim, 2003), and the more acute the dyslexia, the more severe the correlated symptoms.

As reported from Ghisi et al. (2016), The literature underlines that dyslexic young adults are more likely to withdraw from school (Daniel et al., 2006), mature social problems (Sabornie, 1994; Wiener & Schneider, 2002), be emotionally bothered (Capozzi et al., 2007), and suffer both from academic and social low self-efficacy, low mood, and scarce hope and motivation when dealing with scholastic assignments (Lackaye & Margalit, 2006).

In light of a link between language impairment and psychological issues (Drum et al, 2009), university students with dyslexia stand at a higher risk of mental health problems. Gregg et al. (1992) in fact, reported that dyslexic post-secondary students suffer from anxiety and depression and Riddick et al. (1999) found that they are more likely to experience feeling of academic ineptitude than their normal peers. In a further study, Carrol et al. (2006) demonstrated that university students with dyslexia experienced a high state of anxiety in academic situations which tested their reading abilities. These findings prove that having to read on a daily basis could be a great source of stress and anxiety for dyslexic students, especially when accuracy is demanded.

2.2.2 Dyslexic students in the Italian university setting

In order to facilitate LD students in the process of foreign language learning, teachers at postsecondary school level are nowadays

compelled to guarantee equal learning opportunities in form of compensatory measures and instruments.

In the "legge 170: Nuove norme in materia di disturbi specifici" language impairment like dyslexia, dysgraphia, dyscalculia and dysorthography are defined as legitimate language disabilities "che si manifestano in presenza di capacità cognitive adeguate, in assenza di patologie neurologiche e di deficit sensoriali, ma possono costituire una limitazione importante per alcune attività della vita quotidiana" (Art. 1).

The "legge 170" safeguards LD students right to education and give to the whole Italian school system an opportunity to think back about its teaching methodologies.

It also defends the right of each and every LD student to avail him or herself of both electronic and non-electronic compensatory measures during their university years. Compensatory measures are never to be intended as facilitations or advantages; they rather need to guarantee language-impaired students' autonomy and success in studying and aim to help them in achieving the same object as their non-impaired peers.

Moreover, the Legge 170 establishes the need of official diagnosis and certifications in order to develop *individual educational plans*, which involve the exploitation of diverse teaching methodologies and strategies to meet the "different" students' needs and enhance their potential" (D'Este & Ludbrook, 2013).

The technological compensatory instruments to facilitate study contemplated by the decree are:

- Tables or mind maps;
- Voice synthesizers to convert language text in to speech;
- Recorders instead of note-taking;
- PC word processors with spelling and grammar checks;
- Calculators;

whereas specific exemptions refer to:

- Replacement of written activities with oral activities in case of a severe impairment;
- 30% extra time in written tests;
- quantitative (but not qualitative) reduction of the curricular program.

In addition, the 2011 guidelines establish the creation of a network of tutoring service which is appointed to guarantee the application of the law and to mediate with teachers.

2.3 LD students and foreign language learning

Dyslexia is a learning disability, which manifests itself in several linguistic areas. Due to the linguistic nature of the impairment, dyslexic children have been proved to experience more difficulties than their normal peers in foreign language acquisition. Although LD students encounter the greatest deal of difficulties with reading and spelling, the challenges that they undergo are usually sorted in five language subsystems, namely:

1. Phonology: difficulty in production and discrimination of phonemes;
2. Morphology: difficulty in understanding language units such as affixes or suffixes and difficulty with word formation rules;
3. Lexicon: difficulty in remembering and reproducing vocabulary;
4. Syntax: difficulty in managing with grammar and complex syntactical forms (however, syntactic deficits in poor readers could also be a consequence of prolonged reading difficulties. Vellutino & Scanlon, 1987a).
5. Style: difficulty in written and oral expression of concepts.

A foreign language classroom inclusive of both dyslexic and language typical students represent a challenge not only for impaired pupils but

also for their language teacher. The rate of possible difficulties depends on many factors, including the choice of foreign language and the teaching style of the foreign language educator.

2.4 Foreign language choice

The degree of success of an LD student in the foreign language classroom depends primarily from the foreign language chosen. According to Schneider & Crombie (2003) indeed, "Depending on the major areas of linguistic processing difficulties (e.g., listening, pronunciation, speaking, grammatical structures, reading and/or writing FL text), some FL languages might be easier to handle than others" (p.14). Even though literature on the subject is still quite scarce, anecdotal evidence suggest that "students with poor auditory processing skills which manifest in poor listening and speaking skills and who have at least a mediocre sense of sentence structure and of identifying detail in print may experience more success when studying a 'dead' language such as Latin" (p. 15) whereas "those students with poor reading and writing skill, but fairly good listening and pronunciation ability, may best profit from a language that offers a fairly regular transparent letter/sound system" (p.15) like Spanish and Italian.

The effects of the typology of the L1 on L2 learning for reading impaired students has been also underlined by Farukh & Vulchanova (2015). Among their findings, the researchers highlight how "exposure to language (the L1), and to specific properties of that language (e.g. morphology) may help children to master similar skills in the L2" (p.227).

2.5 L2 Immersion for LD students

Farukh & Vulchanova (2015) examined the possible effect of second language exposure on students with reading deficits. The literature is not yet clear about the beneficial impact of immersion for L2 non-impaired students, the different scores of the reading deficit and the control group on L2 tasks suggests a general positive impact of target language exposure on language learning for LD pupils. L1 reading impairment has a negative impact on L2 abilities but this negative influence may be minimized by a substantial exposure to the target language (Farukh & Vulchanova, 2015) combined with explicit teaching instructions. As reported by the authors of the study: "... L2 outcomes largely depend on factors, such as school curriculum, both through increased exposure to input in L2 and explicit instruction and classroom activities. These results are consistent with theories of language learning which emphasize the role of external stimulation and rich exposure to instances of the patterns to be acquired" (Farukh & Vulchanova, 2015, p.227). One of the further implementations possible is the examination of environmental factors, like the level of exposure of L2 outside the school.

2.6 LD students and English language learning

Mastering reading and spelling is fundamental in the ESL classroom. English orthography is known to be extremely opaque, meaning that the relationship between graphemes and phonemes is neither one-to-one nor consistent. Therefore, reading in English is not as easily acquired as reading in relatively more transparent languages such as Italian or Spanish. Seymore, Aro, & Erskine (2003) demonstrated that among pupils of 14 different European nationalities at their second year of education, the ones who performed the least well in reading aloud pseudo and real words from their own mother tongue were the Scottish, who could pronounce flawlessly only one third of the words

presented. This obviously also applies to dyslexic students, who have been shown to be more likely than their normal peers to undergo reading and spelling issues in English.

CHAPTER 3:

DYSLEXIC STUDENTS. DATA ANALYSIS AND RESULTS

In order to investigate the relationship between students with dyslexia and the University learning environment, a survey approach was adopted in which students attending different Italian Universities were asked questions relating to their experiences learning English as a second language at the University level, with specific questions about the challenges faced by students during English language exams. To do this, we employed the online platform Google Forms, thanks to which we have been able to put together 25 questions, both open and close (especially multiple choices and linear scales). The questionnaire (APPENDIX A) is made up of two sections: one about the experience of the interviewees in taking English exams at university (focusing on how they deal with English as a second language courses) and one more personal, about their life and their foreign language skills.

The questionnaire was posted on a well-known social network, Facebook, and 15 people decided voluntarily to take part in the research. The procedure involved a prior informed consent (APPENDIX C). The people interviewed attended different universities in Italy. Respondents were from the University of Milan (N =3), the university of

Venice (N = 3), Parma (N = 1) Bologna, one in Rome, one in Florence, one in Turin and one in Naples. Three of the people who took part in our research didn't answer the question.

Table 2: Dyslexia diagnosis age

	Frequenza Assoluta
6 anni	2
8 anni	2
9 anni	1
10 anni	2
12 anni	3
13 anni	1
15 anni	1
16 anni	2
21 anni	1

Therefore, we decided to publish it on a popular social network and involve students of different universities and with different majors.

3.1 Qualitative analysis

Question 1: In che modo ti prepari agli esami universitari di lingua inglese?

The most frequent responses provided by students with dyslexia students were: studying alone (46,7%) preparing conceptual maps (33,3%).

Among the 15 participants, dyslexic students reported a preference for studying on their own to prepare English language exams rather than attending study groups or studying with friends. This actually doesn't come as much of a surprise, considering how aware and often ashamed of their disability LD students are usually. As a matter of facts, it takes more for dyslexic students to read and study, they should take more breaks and have clearer and less disturbed (cell phones, pc,..) study environment.

Table 3: How do you study for your English exams?

	Frequenza assoluta	Frequenza relativa
Studio da solo	7	46,7
Studio in gruppo	1	6,7
Frequento lezioni private	1	6,7
Utilizzo mappe concettuali	5	33,3
ND	1	6,7

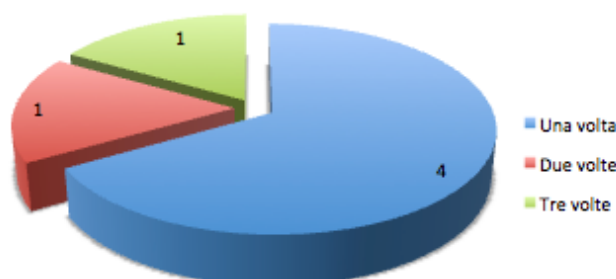
Furthermore, the frequent employment of conceptual maps in preparation to exams is highly recommended in every LD subject and LD students who reached the university level are both aware of what compensation works best for them and able to use it.

Question 2: Quante volte hai svolto la certificazione di livello B1?

Question 3: Con qual punteggio hai passato l'esame di livello?

This question was answered only by the 6 students from Ca' Foscari because OFA B1 is mandatory only for the University of Venice.

Figure 8: How many times did you take the OFA B1 exams at CLA?



The OFA B1 was constructed specifically in order to be accessible to students with disabilities: questions are all multiple choices, the exam takes place on the computer, dyslexics students are allowed more time and they can use a text-to-speech throughout the whole test.

Allegedly, it comes as no surprise that only a few students found the examination not accessible or challenging. In fact, the outcomes of the people who took the exams are rather high (94, 93 points out of 100) or they are perfectly in line with the general outcomes of this examination (60, 65, 70 out of 100). Only four of the people taking part in our research reported that they had no grade but only an "approved" outcome.

Question 3: Hai seguito i corsi in preparazione all'esame di lingua inglese livello B1?

Despite all problems dyslexic students may face in learning a second language, 80% of our interviewees decided not to take any course in preparation of B1 certification exams.

Table 4: Did you take any course to prepare for B1 level exam?

	Frequenza Assoluta	Frequenza Relativa
SI'	3	20
NO	12	80

To explain it, we gathered some specific experiences of LD students who attended courses in various institutions or private schools. All students seem to agree that courses are usually not suitable for them and their disabilities and that it takes them too much stress and effort to keep up with the teachers and the other students in the class.

Question 4: Hai seguito corsi in preparazione all'esame B2?

Question 5: Con quale punteggio hai conseguito la certificazione di inglese B2?

Given the improving difficulty of the B2 exam in comparison to the B1 and the fact that universities usually require only a B1 certification, only one of the interviewees reported to have attended a B2 certification. The student declared that he or she couldn't pass the first part of the exam, but he or she didn't specify what this part was about.

Broadly speaking, the farther along we go in education, the fewer students we find enrolled. If this is true for every student's category, this is obviously even truer for impaired students, who face even more problems than their normal peers in their academic paths. The fact that only one student in our sample took the examination is therefore in line with the average number of students who decide to go on with English studies to higher levels of language.

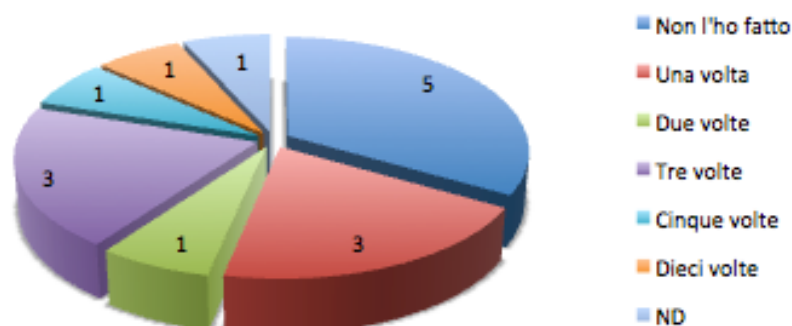
Question 6: Durante le certificazioni di lingua B1 hai usufruito di qualche strumento compensativo?

Five out of the six students who reported to have passed the B1 examination declared to have been offered different supports during the exam. Farther questions and considerations about the various supports offered will be discussed later in this chapter.

Question 7: Quante volte hai ripetuto l'esame di Lingua e Traduzione Inglese 1?

Question 8: Quale punteggio hai ottenuto all'esame di Lingua e Traduzione Inglese 1?

Figure 9: How many time did you take your English language and translation 1 exam?



Three of the people who took English Language and Translation 1 in our sample passed it the first time that he or she tried it, whereas three had to try it 3 times. The others had to try it from a minimum of 2 times to a maximum of ten. The outcomes of the exams are shown in the chart below.

Table 6: English language and translation 1 outcomes

	Frequenza assoluta	Frequenza relativa
28/30	2	28,6
18/30	2	28,6
Approvato	3	42,9

Question 9: Quale sezione dell'esame di Lingua e Traduzione Inglese 1 ti ha creato più problemi?

The most difficult part of the exam of English Language and Translation 1 for dyslexic students seems to be the writing part. Reading and writing are indeed the most problematic disciplines for a dyslexic student dealing with a second language. As explained in the second chapter of this work in fact, LD students have usually problems with grammar and complex syntactical forms as well as with written expression of concepts.

We actually expected a higher percentage of issues related to the Reading part of the exam, but being our sample quite small, it is normal to deal with unforeseen results.

Table 7: Which one was the most difficult section in the English language and translation 1 exam?

	Frequenza Assoluta	Frequenza Relativa
Speaking	3	20,0
Reading	2	13,3
Writing	5	33,3
Listening	1	6,7
Modulo	1	6,7
ND	3	20,0

Question 10: Quale di questi fattori ti ha ostacolato maggiormente durante l'esame di Lingua e Traduzione Inglese 1?

Anxiety and concern about the length of the exam (over 4 hours long) was what mostly concerned dyslexic students in our sample during the exam of English Language and Translation 1.

As far as length is concerned, dyslexic students have the right to use 30% more time than their normal peers, in order to cope with their difficulties in reading and writing.

Anxiety on the other hand remains a big issue for dyslexic people from a very young age. This is the most common emotional symptom developed in LD subjects and it's strictly related to their low self-esteem. Approaching an exam date, it is very common for dyslexic students to start anticipating the failure and feeling anxious if not even depressed.

Table 8: What bothered you mostly during the English language and translation 1 exam?

	Frequenza Assoluta	Frequenza Relativa
Lunghezza dell'esame	5	33,3
Ansia	5	33,3
Qualità dei materiali d'esame	2	13,3
ND	3	20,0

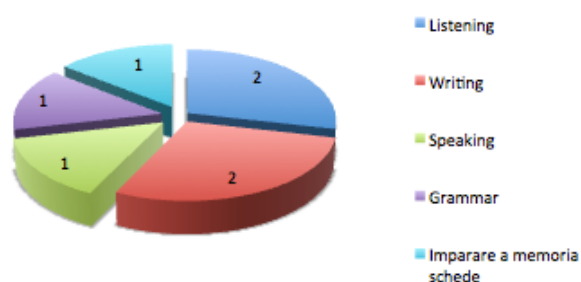
Question 11: Quale punteggio hai ottenuto nell'esame di Lingua e Traduzione Inglese 2?

Question 12: Quale sezione dell'esame di Lingua e Traduzione Inglese 2 ti ha creato più problemi?

Question 13: Quali di questi fattori ti ha ostacolato maggiormente durante l'esame di Lingua e Traduzione Inglese 2?

The exam of English Language and Translation 2 has been done only by two of our interviewees and the outcome of the tests is 24 out of 30 in both cases. However, more than two people expressed their opinion about the most difficult section of the exam, the data are shown in graph below.

Figure 10: What was the hardest section in your English language and translation 1 exam?



What have been reported, as major issues during the exams are anxiety, the length of the test itself, lack of time and bad quality of exam materials.

The answers relative to the exam of English Language 3 have not been reported because no one of the interviewees took the exam up until now.

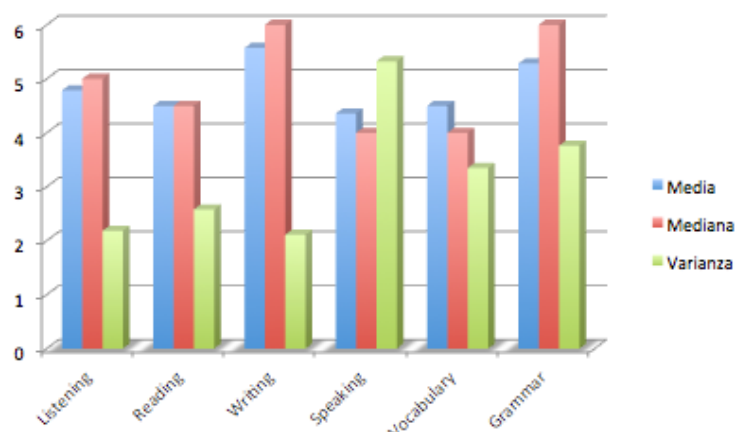
Question 14: Quanto ritieni difficili le seguenti discipline negli esami di Lingua Inglese da 1 a 7?

- Listening
- Reading
- Writing
- Speaking
- Vocabulary
- Grammar

The average values given to the different categories are rather high, which means that all categories have been reported as difficult from our sample.

However, the highest values are the one relative to writing and grammar.

Figure 11: Complexity of English language skills during exams (1-7)



Writing in particular, shows a very low variance value, which means that all of the interviewees agreed on the difficulty of this language area.

On the contrary, even though the average value relative to the speaking category is higher than expected, the very high variance shows a strong disagreement among the participants of our research.

Even though our data are not enough to prove any theory, the findings discussed above are perfectly in line with what was expected from the study of the literature.

Question 15: Ci sono strumenti o misure compensative messe a disposizione dall'università di cui non hai usufruito?

The question was misunderstood by at least 27% of our interviewees, probably because of its negative form.

Among the people who answered correctly, only two reported to have not used any aids: one declared that the various supports were not useful to him /her in any way, whereas the other didn't even show the dyslexia diagnosis to the university.

Question 16: Le misure e strumenti compensative messi a disposizione dell'università sono stati rispettati?

Table 9: Were the aids and special supports promised by universities respected?

	Frequenza Assoluta	Frequenza Relativa
SI'	13	86,7
NO	1	6,7
ND	1	6,7

Only one respondent declared that the aids and supports promised by the university have not been respected.

Even though there are still more than a few issues with dyslexia understanding in schools and universities, we are pleased to see that with the more attentive regulations and the new awareness about the problems, the majority of students reported to have had what is due to them.

Question 17: Hai potuto usufruire di strumenti compensativi durante gli esami di lingua? Se sì, quali?

Question 18: Le misure di cui hai usufruito sono state effettivamente utili al superamento dell'esame?

Table 10: What special supports were you allowed to exploit during your English language exams?

	Frequenza Assoluta	Frequenza Relativa
Computer	2	8,7
Tempo aggiuntivo	11	47,8
Divisione in parti dell'esame	1	4,3
Tutor	2	8,7
Possibilità di svolgere l'esame oralmente	1	4,3
Possibilità di ascolto fino a dieci volte	1	4,3
Esame senza produzione scritta	1	4,3
Testo più grande	1	4,3
ND	3	13,0

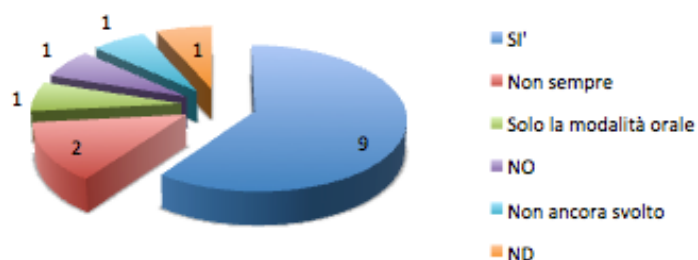
As shown in the chart above, the aids offered to almost all our interviewees is the possibility to have more time to complete their language exams. As a matter of facts, recent regulations have allowed LD students to have 30% more time during tests in schools and universities.

The use of a computer and the permission to take the exams in an oral format are also part of the new law, even though, apparently, these aids are less common in universities. Of course, when it comes to language learning, it is disputable whether the omission of written tests would permit a correct evaluation of the language learnt.

The majority of our interviewees seem satisfied with the aids that they were allowed to exploit during their English language exams. In

particular, one of them reported that the allowance to take the tests only orally was the only support that worked for him/her.

Figure 12: Were the special supports useful in order to pass the English language exam?



Question 19: All'interno della tua università esiste una figura specifica addetta al supporto dei DSA?

As we expected, all Italian universities have nowadays a person in charged to supervise the work with LD students and to worry about aids and supports offered to them.

Only 13,3% of the people in our sample declared they have never been aware of such a figure in their own academic experience.

Table 11: Was there any special figure in charge of LD students at your university?

	Frequenza Assoluta	Frequenza Relativa
SI'	13	86,7
Non lo so	2	13,3

Question 20: Quali provvedimenti sono stati presi durante i tuoi studi di lingua straniera?

Question 21: Quali dei provvedimenti presi ti sono stati più utili?

33% of our interviewees decided to cope with their own language issues taking private lessons whereas a total of 33 % decided to spend a period of time (more or less than a month) in an English speaking country.

Table 12: What special measure did you take to cop with dyslexia during your study path as far as ESL is concerned?

	Frequenza Assoluta	Frequenza Relativa
Ho vissuto in paesi madrelingua inglese per meno di un mese.	2	13,3
Ho vissuto in paesi madrelingua inglese per più di un mese.	3	20,0
Sostituzione di prove scritte con prove orali.	1	6,7
Ho preso ripetizioni di inglese.	5	33,3
Ho avuto amici di penna inglesi.	1	6,7
Ho frequentato corsi privati.	2	13,3
Nessuno	1	6,7

As already explained in Chapter 2 of this work, L2 immersion has been studied to be more efficient for LD student rather than non-impaired ones. More than one person in our sample reported, in fact, that spend a period abroad was what helped them more in the process of English learning.

Only few of the people who had private lesson experiences think that they were pivotal for L2 learning. This is probably because language impaired pupils need to be taught a different study method before the subject itself.

40% percent of the people in our sample think that no support has actually helped them in language learning.

Table 13: What special measure helped you the most as far as ESL?

	Frequenza Assoluta	Frequenza Relativa
Vivere in un paese straniero	2	13,3
Non ho ricevuto provvedimenti speciali	1	6,7
Il tempo maggiorato durante i test	1	6,7
Avere un amico di penna inglese	1	6,7
Programmare le interrogazioni a scuola	1	6,7
Ricevere lezioni private	2	13,3
Nessuno	6	40,0
ND	1	6,7

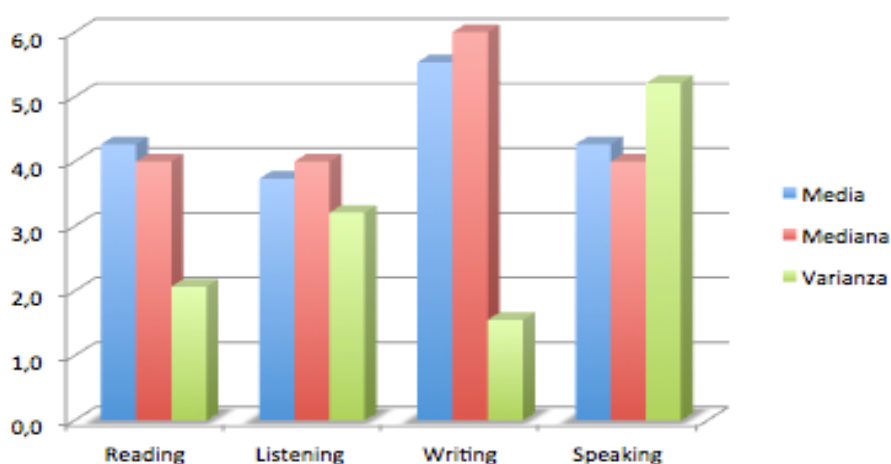
Question 22: Quanto trovi difficili le seguenti discipline inglesi da 1 a 7?

- Reading
- Listening
- Writing
- Speaking

According to the graph below, the most difficult language area for L2 students is writing. In addition to very high average and median values, our data show a very low variance too, which means that almost each and every person in our sample agrees on the level of English writing difficulty.

As far as speaking is concerned, the high variance value show a strong disagreement of our participant about the degree of difficulty encountered in English oral production.

Figure 13: Complexity of English language skills (1-7)

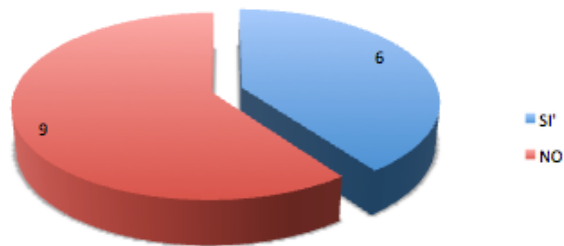


Question 23: Ti trovi in difficoltà a usare il dizionario inglese?

Six of our interviewees reported not to feel comfortable in using English paper dictionaries.

As a matter of facts, using dictionaries, has been prove exhausting and frustrating for dyslexic students, especially when it comes to English ones. This come from the fact that looking a word up in a paper dictionary firstly implies the knowledge of its spelling and secondly the capacity scan the page quickly. Unless students have had a full training of building words using prefixes, stems, roots and suffixes, finding words in a dictionary could be challenging and stressing.

Figure 14: Do you find it difficult to use the English dictionary?



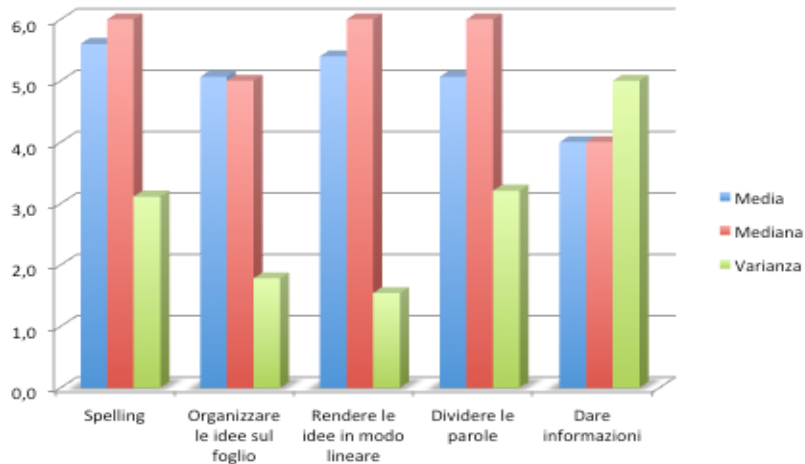
Question 24: Quanto trovi difficili le seguenti discipline inglesi per quanto riguarda la produzione scritta da 1 a 7?

- Spelling
- Organizzare le idee sul foglio
- Rendere le idee in modo lineare
- Dividere le parole
- Dare informazioni

The easiest task for the students in our sample when it comes to written production is conveying pieces of information. However, being the variance value for this section quite high, it is unfair to relate and make hypothesis on the high average value.

All section appears generally challenging for dyslexic students, especially spelling and organizing ideas. As we already explained and studied in the answers of question 22, writing is in fact the most difficult section of English language learning for LD students.

Figure 15: Complexity of English written production skills (1-7)

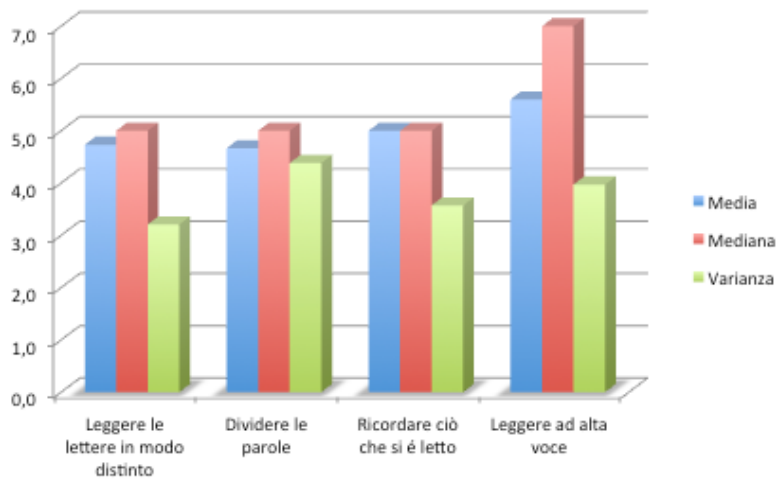


Question 25: Quanto trovi difficili le seguenti discipline inglesi per quanto riguarda la comprensione scritta da 1 a 7?

- Leggere le lettere in modo distinto
- Dividere le parole
- Ricordare ciò che si è letto
- Leggere ad alta voce

Reading is very challenging for dyslexics, who usually lack in speed and phonological awareness. As expected from the study of literature in fact, reading out loud is what challenges dyslexic students the most as far as reading in English is concerned. All other fields appear in the graphic to lie almost on the same degree of difficulty even though the variance values suggest different and various opinions on the subject.

Figure 16: Complexity of English written comprehension skills (1-7)



3.2 Data analysis and results

We disposed of the data below to give an answer to all our research questions. What we found will be explained below.

A quale età è più utile diagnosticare la dislessia a uno studente?

Table 14 : How many times did you take your English language and translation 1 exam/ when were you diagnosed with dyslexia?

	Quante volte hai dovuto sostenere l'esame di inglese 1?								
Quando ti è stata diagnosticata la dislessia?	0	1	2	3	5	10	nd	Importo totale	
6	1				1			2	
8	1		1					2	
9		1						1	
10	1			1				2	
12		2						2	
13	1							1	
15				1				1	
16	1			1		1		3	
21							1	1	
Importo totale	5	3	1	3	1	1	1	15	

As we already discussed in chapter 2 there is agreement in the literature concerning the importance of an early dyslexia diagnosis. Students usually benefit from knowing that they are dyslexic before starting their university studies firstly because they experienced a much lower rate of failures in their studies and secondly because they know how to access and effectively use different learning strategies.

The data we collected agree with the theories reported: as shown in the chart above, there seems to be a link between the age in which dyslexia has been diagnosed and how much times students had to have their first English Language Exam before passing it.

A great deal of attention has to be put, therefor, toward assessing dyslexia at a very early stage in education, in order to give more chances to children to get the support they need and to learn the

strategies that will help them cop with their disability along their whole school and academic path.

Quali strumenti compensativi sono più adeguati al fine dello svolgimento degli esami di inglese universitari?

Table 15 : English exam: Tries / Aids

	Quante volte hai sostenuto l'esame di lingua inglese 1?									
Di quali strumenti hai usufruito durante l'esame di lingua inglese 1?	0	1	2	3	5	10	ND			Importo totale
Tempo aggiuntivo	1	1	2	1						5
Tempo aggiuntivo e uso del computer		2								2
Tempo aggiuntivo e divisione dell'esame	1									1
Tempo aggiuntivo e tutor			1							1
Tempo aggiuntivo, tutor e esame solo orale						1	1			2
Testo più grande	1									1
ND	2		1							3
Importo totale	5	3	1	3	1	1	1			15

Table 16 : English exam: Outcome/ Aids

	Quale risultato hai ottenuto nell'esame di inglese 1?					
Di quali strumenti hai usufruito durante l'esame di lingua inglese 1?	18	28	nd	Non ancora svolto	Sufficienza	Importo totale
Tempo aggiuntivo			2	1	2	5
Tempo aggiuntivo e uso del computer		2				2
Tempo aggiuntivo e divisione dell'esame				1		1
Tempo aggiuntivo e tutor					1	1
Tempo aggiuntivo, tutor e esame solo orale			1		1	2
Testo più grande			1			1
nd	1		2			3
Importo totale	1	2	6	2	4	15

To investigate which aids are more useful for a dyslexic student during an English language exam, we decided to put together data relative to the number of times the students in our sample took their exam before passing them, their final grade and the different supports that they had at their disposal.

What appears clear from our charts is that the students who had more time and were allowed to write their exams on a computer passed their exam the first time they tried it with a very high mark, whereas the only employment of additional time doesn't always work.

We wish that this research will be taken on and conducted on a larger scale in order to prove in which direction English language testing should move to facilitate LD students in the process of English language learning.

Quali provvedimenti presi durante il percorso scolastico dello studente
influiscono sul livello di lingua inglese all'università?

**Table 17 : English exam: Outcome/special Table 18 : English exam: Outcome/ Tries
measures**

	Risultato esame di lingua inglese 1																	
Provvedimenti presi nel corso degli anni scolastici.	18	28	ND	Non ancora svolto	Sufficienza													Importo totale
Compensazione prove scritte con prove orali					1													1
Ho avuto un amico di penna americano				1														1
Ho frequentato corsi privati				1														1
Ho frequentato vacanze studio di meno di un mese.				1				1										2
Ho preso ripetizioni di lingua inglese	1																	3
Ho vissuto in paesi di madrelingua inglese per più di un mese.				2	1													3
Tutti						1												1
Nessuno					1													1
Più tempo, testi stampati più grandi					1													1
Importo totale	1	2	6	2	4	15												

	Risultato esame di lingua inglese uno.																		
Provvedimenti presi nel corso degli anni scolastici.	0	1	2	3	5	10	ND												Importo totale
Compensazione prove scritte con prove orali		1																	1
Ho avuto un amico di penna americano	1																		1
Ho frequentato corsi privati	1																		1
Ho frequentato vacanze studio di meno di un mese.	1			1															2
Ho preso ripetizioni di lingua inglese			1	1	1	1													4
Ho vissuto in paesi di madrelingua inglese per più di un mese.		2		1															3
Tutti																			1
Nessuno	1																		1
Più tempo, testi stampati più grandi	1																		1
Importo totale	5	3	1	3	1	1	1	1	15										

With the same process explained before we tried to investigate which action taken during the whole language education path of the students in our sample had the strongest impact on their English language level. To do that we linked the data relative to the number of times the students in our sample took their exam before passing them, their final grade and the action undertaken by them in order to cope with their disability.

In the study reviewed in chapter 2, Farukh A. and Vulchanova M. (2015) found out that L2 outcome for LD students strongly depends on the school curriculum, increased exposure to input in L2 and explicit instruction and classroom activities. Our data show in fact how much the exposure to the English language input worked for the dyslexic students in our sample.

Since the literature is not clear and our study is not big enough we hope that further and wider studies will be able to explore this field deeper.

We found interesting to compare our results to the opinion given by the students in our sample once asked about what helped them more in second language learning. It seems that students are quite aware of the importance of L2 immersion in language education but they also found taking private lessons useful.

Table 19: What special measure helped you the most as far as ESL?

	Frequenza Assoluta	Frequenza Relativa
Vivere in un paese straniero	2	13,3
Non ho ricevuto provvedimenti speciali	1	6,7
Il tempo maggiorato durante i test	1	6,7
Avere un amico di penna inglese	1	6,7
Programmare le interrogazioni a scuola	1	6,7
Ricevere lezioni private	2	13,3
Nessuno	6	40,0
ND	1	6,7

Quale metodo di studio in preparazione all'esame di lingua inglese 1 è più efficace?

Considering both the data relative to the first English language exam and the ones about the outcome of the OFA B1 certificate, our data seem to demonstrate that it is better for students to study alone in order to prepare an English exam.

**Table 20: B1 certification: Study method/
Outcome**

	Metodo di studio					
Risultato esame di lingua inglese 1	Frequento lezioni private	ND	Studio da solo	Studio in gruppo	Utilizzo mappe concettuali	Importo totale
18					1	1
28			2			2
Sufficienza	1		1		2	4
Non ancora svolto			1	1		2
ND		1	3		2	6
Importo totale	1	1	7	1	5	15

**Table 21: B1 certification: Study method/
Outcome**

	Metodo di studio					
Risultato OFA B1	Frequento lezioni private	ND	Studio da solo	Studio in gruppo	Utilizzo mappe concettuali	Importo totale
60			1			1
65				1		1
93			1			1
94			1			1
Non ho eseguito corsi d'inglese al CLA	1					1
ND		1	4		5	10
Importo totale	1	1	7	1	5	15

We speculate that studying alone is probably better for LD learners because it gives them the opportunity to follow their own time schedule and rhythm and allows them therefor to exploit with calm all the support mechanisms they need. However, our quite limited sample doesn't give us the chance to postulate any certain theory.

Quale dei problemi legati alla dislessia influisce maggiormente sui risultati dell'esame di lingua?

Table 22: English language and translation 1 outcome / What bothered you mostly during the exam

	Punteggio esame d'inglese 1						
Quali di questi fattori è stato più difficile da affrontare durante l'esame.	18	28	Idoneo	ND	Non ancora svolto	Sufficienza	Importo totale
Ansia	1		1	1	1	1	5
Lunghezza dell'esame		2		2		1	5
Qualità dei materiali d'esame			1	1			2
ND				2	1		3

Dealing with anxiety and the length of the exam is what has been reported to be more challenging by students in our sample once asked directly in question 10.

However, linking exam results and dyslexia comorbidities, it seems that while the issues linked to the length of the exam paper can be solved using more time and special aids, anxiety is what impacts the most on language outcomes. As already mentioned before, anxiety is the most common emotional symptom developed in LD subjects and it's strictly linked to their low self-esteem. Approaching an exam date, it is very common for dyslexic students to start anticipating the failure and feeling anxious if not even depressed. Apparently this feeling has great impact on the outcomes of exams and therefor on further failures.

The influence of anxiety on dyslexic students accomplishments is one of the reason why early diagnosis are so helpful to help them cop with their impairment.

3.3 Discussion

Based on an analysis of the data from the survey, we can identify a few key points in order to improve the conditions of dyslexic students who attend English language courses at university.

1. It is pivotal to instruct teachers and parents to be able to recognize early signs of dyslexia in children. Being early diagnosed will help students in leaning instruments and study aids that will help them throughout their whole education path. An early diagnosis will also help LD students in overcoming problems related to anxiety in the classroom and during tests or exams. In this way students will get to university with a wide awareness of their impairment and a smaller failure "luggage".
2. Our research illustrated the importance of special supports during English language exams, especially additional time and

the use of computers. Dyslexic students must be allowed all devices needed in order to cope with their impairment in the best way possible at all levels of education, in order to facilitate their learning and avoid anxiety feelings related to failure.

3. Second language immersion seems to work impressively for LD students learning English as a second language. Our results showed, in fact, that students who experienced a higher exposure to second language input, managed to get to higher outcomes in their university language exams.

Although our research is not big enough to expose certain results, we hope that future researches will follow our lead with a much wider sample.

If our conclusion will be proven correct, English language students with language impairments will have access to powerful and facilitating means of learning, which will enable them to have a different approach to second language acquisition both emotionally and didactically.

CHAPTER 4:
DEAF COLLEGE STUDENTS IN THE FOREIGN LANGUAGE
CURRICULUM

Estimates of the prevalence of deafness among the Italian population are 1/1000. This figure increases heavily considering deaf migrants living in our country. This situation, combined with the importance of English language learning in education has recently posed a great challenge for English language instructors: all deaf children must be provided with various linguistic competences in order to be given the chances to be included with all the different aspects of our society. This parallels in some ways the issue of deaf foreigners learning Italian as their L2. According to Volpato & Bertone (2009) "no data exist, to our knowledge, on the problems raised from this phenomenon and on the linguistic competence of deaf foreigners learning Italian" (p.8) as well as very little has been published about the process of foreign language learning for a deaf student. There are several reasons for the lack of

studies on second language acquisition by deaf students: first, deaf learners are heterogeneous, with different backgrounds from a linguistic, social, economical and cultural point of view (Bertone & Volpato, 2009). These complications make the process of gaining data and monitoring performances very difficult. Within the teaching ESL theories fail in fact in the instruction for a common language education path for deaf or hard of hearing pupils.

The situation doesn't change much in First Language Acquisition for deaf children. As a matter of facts, deaf students experience enormous difficulty in acquiring their own oral languages in comparison to their natural acquisition of signed ones. Without a complete access to sounds and intonations of an oral language, the process of acquisition for deaf learners is often unnatural and happens at a much slower rate than for hearing learners (Quigley & King, 1980). According to Berrent (2001), some deaf learners are able to compensate for the lack of access to the oral language and obtain native-like knowledge of the language. However, plenty of deaf learners accomplish only partial acquisition of the spoken language and experience constant difficulties in reading comprehension and written production (Berrent, 2001).

Deaf children don't learn at home the language spoken in their society, which has to be acquired during their first years of schooling. "The main educational challenge faced by deaf students is the acquisition of the language of their own community- acquisition not only of oral production but of the linguistic system itself. For many deaf students the language of the community becomes neither their first language, they may never achieve native-like grammatical knowledge in the language, nor, in the usual terms, a second language, in the sense that they may not be exposed in early life to any other language they can readily acquire (Swisher 1989).

As a deaf learner progresses through elementary school, linguistic elements of sentence structures as well as other written elements can become harder to be understood and explained. By the time many hearing people reach high school or college, the words and syntax of academic writing has become natural to them whereas deaf students have been compelled to learn the language spoken in their society only through reading and writing.

The Italian Constitution and several norms outside of it ratify the principle that all students have a "right to education", a right to study valid for each and every citizen, understanding how to teach a foreign language (especially English) to deaf people in state schools is quite pivotal for Italian educators. The literature on English as a second language for deaf students is scarce, we will begin our discussion providing a general outline of deaf education, especially focusing on the oralism-manualism dichotomy.

4.1 Oralism and Manualism in Italy: a brief survey of different approaches

When dealing with a deaf student, teachers must face the choice of what method would better suit their purposes (Vopato, Bertone):

- Oralist method: an approach that works on auditory training, articulation ability and lip-reading. It relies exclusively on written and oral language.
- Manualism/Use of sign language: this approach uses exclusively signs and gestures. People who adopt a manualalist approach in education usually reject Oralism.
- Bilingual education: this approach accepts the importance of both oral and sign language. Sign language is recognized as a natural language and is introduced in the input as early as

possible. This allows deaf children to be exposed to a natural language and an associated culture and belonging to a community of signers.

- Bimodal approach: this approach combines oral and sign language but it is in fact based on the oral one. For example this means that the word order is the one of oral Italian and that function words –which do not exist in sign language- are finger-spelled. This approach is claimed to improve oral language more than the only use of sign language.
- Logogenia: this is a strictly written method, which aims to teach language properties through reading techniques. Since it exploits reading abilities, it has to be used at a later stage of language development,.

There is a great amount of variability among deaf speakers when it comes to their competence in both oral and sign language. Hence, these methods give different results depending on the person they are used with.

Although data from a systematic census are lacking, estimates of the number of deaf people in Italy are around 70.000. Only 5% of these are children of deaf parents and therefore have LIS as their mother tongue. Lately, however, researchers have noted that the popularity of bilingual/bimodal approaches has increased, and this is led by young people and teenagers.

4.1.1 History of the methods

The oral method forbids deaf students to use any sign language in or out of the classroom. Students are instructed on how read language cues and the focus is on developing adequate speaking abilities, while suppressing any attempts to pick up a sign language. Oralism has been widely popular for many years, although in the last few decades it is facing a rapid decline.

Manualism is a method based especially on signing and gesturing. It also includes lip and facial expression reading. It arose in the second half of the 18th century in Europe and was later on validated and expanded with the foundation of the Connecticut Asylum for the Education and Instruction of Deaf and Dumb Persons.

Alexander Graham Bell was one of the greatest supporters of oralism. He started his campaign in the 1870's attracting the attention of politicians, teachers, doctors and the wealthy, almost none of whom were deaf (Benito, 2014). In his campaign, Bell both stressed the need for integration of deaf pupils and exploited the common harsh belief that gesturing was strictly linked to a low class and came with strong racial overtones (Neisser, 1983). To do that, he travelled with oral deaf students, who inspired hope and confidence to all of those deaf people who didn't completely feel part of their society. However, he failed to show how hard it for deaf people to produce clear spoken output and that only a few deaf people can reach a good degree of oral language.

After the Conference of Milan of 1880 the oral method took off in full swing: oralism was declared superior to manualism and the manual method was banned from all European and American schools. This period is often referred to as the "dark ages" for deaf speakers lasted until the 1960's, when manualism was re-introduced in deaf education. Oralism is a double edged sword: it can lead to an improvement in inclusion but it also often leads to a strong isolation of deaf individuals who struggle to communicate even with their own families.

Today the debate is still alive, despite the scientific evidence supporting manualism. According to Neisser (1983), the success rate of oralism was of only 4 percent and children who grew up with a sign language had much larger vocabulary sizes than those who were educated orally. Additionally, in order to overcome difficulties in communication during the ban of sign language, almost all deaf

students began signing in secret, showing their propensity toward a more efficient and more effective language (Neisser, 1983).

4.1.2 Current approaches

Even though the debate between manualism and oralism isn't as extreme as it was in the past, it is still alive in deaf education and the question of whether to use sign or oral language has still not found an answer.

As reported by Mellon et al. (2015) "Some experts suggest that all deaf children, with or without a cochlear implant, should be taught a sign language" whereas "others worry that learning a sign language will interfere with the extensive and intensive rehabilitation that is necessary to reap the most benefit from a CI or that asking parents to learn a new language to communicate with their child is too onerous" (p.170). According to Mellon et al. (2015) in fact, more than 95% of deaf pupils come from hearing families, where deafness is seen as a disability, since parents can't share their knowledge with their children using the typical medium. Hence, pupils tend to be forced to learn the oral language (through lip-reading) of the country before the sign language, therefore delaying the acquisition of a sign language which they otherwise could acquire naturally as a first language. . However, as reported by Geers et al. (2009), takes on the sole use of sign languages are mixed: the community of experts who deals with deaf and hard of hearing students wildly disagree about the use of sign language in deaf education. Many professionals believe that listening to and trying to speak oral languages is the only way deaf people have to navigate efficiently in the majority world of the hearing. This contrasts with statements to the contrary by influential linguists such as Donna Napoli. Napoli encourages the use of both signs and spoken language to maximize chances for developing a firm linguistic foundation and

claims that sign and speech facilitate each other, rather than one hindering the other (Mellon et al., 2015, p.173).

Approaches to language exposure and education for deaf people are likely to evolve as our technology and scientific theories develop. Meanwhile it is essential to respect both the beliefs of parents who have their children best interests at heart and of people who desire to communicate and be part of the world around them. Despite the unpopularity of oralism, in fact, lip-reading and speaking techniques are still widely used to teach deaf children to speak.

4.2 Typical issues in language acquisition

Lenneberg (1967) demonstrated that deaf children's oral language is not completely developed, due to the insufficient exposure to the oral input in the critical period, the time –usually from birth to puberty– when the human brain is maximally predisposed to develop grammars. Later exposure is linked to incomplete or non-native like grammatical attainment. Therefore, the linguistic abilities of deaf speakers/signers are strongly influenced by the delay and quality of input exposure.

And There are several linguistic domains where deaf individuals exhibit difficulties and this is true across different languages (e.g. for Dutch, see Hammer, 2010; Verbist, 2010; for English, De Villiers, 1988; De Villiers et al., 1994; Quigley and Paul, 1984; for French, Delage, 2008; Delage and Tuller, 2007; Tuller, 2000; for Italian, Ajello et al., 2002; Caselli et al., 1994, 2012; Chesi, 2006; Rinaldi and Caselli, 2009; Volpato, 2010; Volterra and Bates, 1989):

- Vocabulary
- Phonology
- Morpho-syntax

Deaf speakers of Italian tend to produce short sentences instead of complex ones and to omit functional elements which are often crucial

cues for the correct interpretation of the sentence. This also may depend on the input: people who talk to deaf individuals tend to simplify their language as much as they can. The linguistic input, already quantitatively and qualitatively scarce, gets, therefore, further limited (Volpato & Bertone, 2012).

As far as language production is concerned, deaf people tend to ignore non-stressed elements: in Italian this affects articles, clitic pronouns, and prepositions. Because these elements are unstressed, they tend to be co-articulated with either previous or following words and are, therefore, not noticeable during lip-reading (Volpato & Bertone, 2012). During lip-reading attention is usually focused on content-words at the expense of functional words, despite the fact that these elements carry important relational information between the words in a sentence. Hence, he or she creates sentences similar to telegraphic communication, in which syntax relies on the word order and, as a consequence, vagueness remains pretty high (Volpato & Bertone, 2012).

4.3 Toward an inclusive classroom

The achievement of an inclusive classroom represents a challenge not only for deaf students but also for their instructors who are often not fluent signers themselves and who have to adapt their methods to meet the needs of deaf students and rely on the support from specialists and other students. A few of the challenges a teacher can encounter in teaching a classroom with deaf and hearing students are:

- dealing with a student's social delays and emotional problems in addition to the learning difficulty.

- facing the student as often as possible (it is very important for teachers never to talk while writing on the blackboard or never moving too much from the front desk)
- thinking about other students in the class (dealing with a deaf student can be time-consuming and other students may lose interest in the lesson or start talking)
- spending more time preparing the lesson the teacher needs to bring in visual aids or add captions to videos)
- checking in frequently to make sure the hearing impaired student is following and understanding the lesson

The real nature of learning can't be understood without an analysis of the complexity of its interaction with social, emotional and environmental factors. (Alexander, Shallert & Reynolds, 2009). However, in the process of teaching deaf students these interactions have often been put aside.

Nowadays, the increase in the number of deaf students who come from developing countries and have competences in neither their oral nor their original sign language in Italian schools has raised several other questions on how to enhance language acquisition in deaf subjects. As a matter of facts, these individuals should be enabled and push to the target language in order to be integrated in both the deaf and the hearing new community.

4.4 Cochlear Implants

The literature on cochlear implants (CI) tells us a great deal about auditory perception (Nicholas & Geers 2007) but fails to account for the grammatical competences of the children implanted. CIs are electronic implants which bypass the damaged hair cell system in the cochlea and allow acoustic information (sound waves) to be turned into nervous impulses picked up by the auditory nerve and to then be passed on to

central auditory pathways which terminate in primary auditory cortex.

CIs are very popular among parents of deaf children. This is partly due to the fact that parents want their children to attend school with their hearing peers. Mainstream classrooms apparently seem the best way to offer a potentially successful education path, something every parent wants for his or her own child.

Cochlear implants have significantly changed the position of deaf students in the classroom, particularly if the implantation occurs early, usually before the second year of life (18 months). However, these kids still need a very specific support system, which will help guaranteeing their success. The specific requirements and frequency of provision will differ by pupil and may vary over time for any single student. The student with a cochlear implant will need special and constant evaluation and monitoring in order to always receive the support required at the time in which it is needed.

Many studies have shown that language in children wearing a CI develops much faster than in children using other or no aids (Blamey et al., 2001; Miyamoto et al., 1999; Tomblin et al., 1999), although receptive and expressive morphology and syntax are problematic (Caselli et al., 2012; Geers et al., 2009; Hammer, 2010; Spencer et al., 2003; Volpato, 2010; Young and Killen, 2002) and are not mastered age-appropriately.

For Italian Volpato (2010) documented a linguistic delay caused by deafness even in children with a CI. In a study looking at the production of relative clauses, Volpato found that implanted children produced errors that age-matched children no longer produced and that these errors were typical of younger hearing children. Volpato & Bertone (2009) looked at the errors produced by implanted 7 to 13 year olds and found errors both in written and spoken language production such as:

- omission or substitution of determiners,

- omission of clitic pronouns,
- prepositions,
- Incorrect use of number and gender agreement
- Incorrect use of verbal morphology
- Omission of copulas
- Omission and/or substitution of auxiliaries and modal verbs.

The authors also found a preference for short sentences and a dis-preference for complex sentences such as relative clauses and sentences with syntactic movement such as passives (Volpato & Bertone, 2009).

4.5 Written language

Dealing with deaf students, it is quite common to rely on written language (reading and writing) to evaluate students' linguistic competence. The passage from an oral to a written language has more than one consequence though. Writing isn't a mere transcription of oral language; it substantially differs from it under several points of view. Prosody, for instance, is absent and condensed into punctuation; as a result the reader has to rebuild it in his or her own mind while reading. Deictic elements become functional ones and are used as cohesive instruments but their usage is very different from the position they occupy in spoken language – according to Halliday , 1992, written language has to be considered a product whereas spoken language is a developing process.

Written texts have been proved to possess more integrated linguistic units, i.e. subordinates, whereas in the oral language coordination is the most recurring link between two clauses (Chafe 1982; Ong 1982;

Halliday 1992). Furthermore several linguistic abilities play a role in writing such as language, structural, communicative knowledge and so on.

Administering a written test or exercises, the link between written abilities and general ones has to be held in mind; the evaluation of linguistic acquisition cannot rely, therefore, exclusively on written texts. Language tests have to be prepared carefully in order not to compromise their results. Chesi (2006) reports a larger percentage of errors among deaf students in written rather than oral production.

If writing requires among other things the use of a different code, which initial code would be the input for a deaf student? Surely, it isn't sign language, since it has no written form up until now. We must be talking, therefore, of the Italian language.

According to Ong (1986), writing cannot exist without an oral counterpart and numerous researchers agree with his theory. According to widely influential dual-route models of reading (Coltheart et al. 2001; Plaut et al. 1996; Harm & Seidenberg 1999) that the identification of words is a result of the activation of:

1. An orthographic code,
2. A phonological code,
3. Semantic code.

The passage between the orthographic and the phonological code is obviously an obstacle for deaf people and this usually requires the intervention of a speech therapist. Several studies with deaf children (Conrad 1979; Dodd 1987; Battacchi et al. 1991) have shown that deaf children can develop phonological awareness going from lip-reading to silent articulation.

What about the people who didn't receive appropriate speech therapy interventions? Is it right to expect them to have the same level of access to written language that is observed in other subjects? Perhaps it is too risky to take the access to written language, the only access to

language they have, being it normally, the end of the acquisition process rather than the beginning.

Moreover, an additional point of debate is whether literacy teaching to deaf students can be compared to the one addressing the hearing population, since for the first group, we would be talking about a non-native language (Volpato & Bertone, 2012).

Common questions in the field are: which level of linguistic competence can be expected or required of deaf people? Can they be expected to reach the same level of a hearing person? When and where should we stop asking for an improvement on written language tasks? Which strategies should we use to get to a situation of equal opportunities? Italian sign language can partly answer this question but how can it be compared to written language in school or at work? Literacy is deeply enrooted in our society and it is really difficult to foresee inclusion for people who can neither write nor read.

If it is true that low expectations can lower performances, it is also true that if expectations are set too high, this makes it difficult for both families and teachers unable to accept objective limits. Requests must be carefully calibrated on the each and every individual (Volpato & Bertone, 2012).

4.6 Deafness and foreign languages

The literature on foreign language learning by deaf students, especially at university, is dramatically scarce. Interestingly enough though, several Italian studies on Italian language acquisition by deaf subjects consider Italian, the natural language for the hearing population of the country, as L2 for the non hearing people.

Several issues discussed below in regard to first language acquisition in also apply to second language acquisition. In this paragraph we will try to analyze the challenges and compare them with the ones outlined before.

First of all, having a strong first language is crucial in second language learning. Deaf people who are not exposed to language from birth, struggle all their life with an incomplete competence of the oral and the sign language of their country. This means that not only is sign language pivotal for communication within the deaf community and for the country's oral language acquisition, but it is also the foundation for other language learning. Even though the linguistic input of an oral L2 will arrive later and less frequently than the one in the oral L1, the process with which the deaf individuals approach the different oral languages will be mostly the same.

Very challenging for both students and teachers is precisely the transmission of the L2 oral input from one another. We discussed deeply how relying totally on the written language can't be an answer in language learning. If this is true for an oral language in which a deaf subject has been immersed from birth, it is certainly also true for a language approached only later on. Written competence in the second/foreign language is one of the goals typically expected of . There is no reason why it should be expected to work as a medium for deaf students. Writing and reading in a second language can be quite confusing, especially if the reader has a lack of written linguistic competence even in his or her oral first language. If functional elements are, as we saw above, challenging in the first oral language acquired, they will also be challenging in any additional oral language, and likewise, so will syntactic structures such as relative clauses and passive sentences.

If input in the additional second language is too drastically reduced, in the context of typical second language classroom instruction, perhaps second language mastery will fall short of its potential. This is especially true in the typical university foreign language classroom with a very high student to teacher ratio (30/1). A deaf learner in a mainstream English as a second language classroom has usually faces many challenges, such as being able to lip-read while the instructor talks.

4.6.1 A new proposal

The method that we suggest and that we will try to outline in the following chapters of our work has been thought on the basis of all our premises and criticism.

In our opinion, it is very important, as it is in language education generally, to understand from the first lesson what our deaf student wants and expect from second language learning and try to develop a customized program that follows his or her needs.

On the basis of the data we collected, we think that a useful first step in second language learning by deaf students is the explicit study of the phonological system and an analysis of the regularities that mediate the orthographic and phonological representations of words. I propose to start with an overview of the vowel system and with a detailed study of the phonetic alphabet, which will make the deaf student independent also in his or her following years of second language learning.

We consider the use of the target language fundamental in the second language classrooms. Sign language is needed as language of instructions and explanations but the students will need to have an experience in lip-reading and producing sounds directly in the target language. The use of sign language interpreters have to be limited to the internal and instrumental communication, otherwise the students will never have a direct contact with the second language studied.

Eventually, we suggest a continuative revision of the method used by teachers based on continuous evaluation of the student's learning and needs. The input of language given in the classroom will be necessarily a normal one – teachers must reduce language simplification to the bare minimum- but the expectation placed in the student's production will need to be set on the learner's ability and impediment.

CHAPTER 5: DEAF STUDENTS. DATA ANALYSIS AND RESULTS

In order to investigate the validity of what we learnt in the literature, I developed a questionnaire (APPENDIX B) and we submitted it to a group of deaf people who attended university in Italy. To do that we employed the online platform Google Forms, thanks to which we have been able to put together 23 questions, both open and close (especially multiple choices and linear scales). The questionnaire is made up of two sections: one about the general college experience of the interviewees (focusing on how they deal with English as a second language courses) and one more personal, about their life and their foreign language skills.

The questionnaire was posted on a popular social network, Facebook, and 15 people decided voluntarily to take part in the research. The

procedure involved a prior informed content (APPENDIX C). The 15 respondents ,were 6 men and 9 women. The people interviewed attended different universities in Italy: six of them studied in Rome, one of them attended the university of Cassino and southern Lazio, two of them the one in Pisa and the others studied in Brescia, Genova, Firenze, Napoli, Modena and Bologna. The majored that they followed are shown in the chart below.

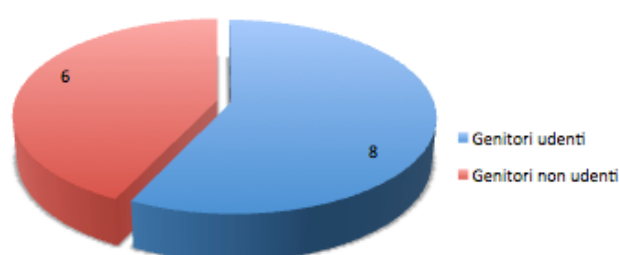
Of the people who answered our question, almost 50% (46,7%) of the subjects in our sample started learning English from elementary school, 33,3% started learning English in "scuola media" and only a few had their first approach to the English language only later on in high school (6,7%) or university (6,7%).

Table 23: Sex and major of interviewees

Sesso	Che corso di laurea triennale hai frequentato?
M	Grafica pubblicitaria
F	Facoltà di Architettura
F	Scienze della comunicazione
M	Scienze Motorie
F	Scienze dell'Educazione
F	Scienze della Formazione
M	Economia
M	Ingegneria Biomedica
M	Ingegneria gestionale della logistica e della produzione
F	Lettere e Filosofia
F	Scienze della comunicazione
M	Economia e Management
F	Scienze della comunicazione
F	Giurisprudenza-Laurea a ciclo unico
F	Lettere e Filosofia

The majority of the people who took part in the research (10 out of 14) were deaf from birth, one became deaf at 2 years of age, one at 4, one at 5 and one became deaf at 23. Finally, as shown in the chart below, only 6 out of the 14 people in our sample have deaf parents.

Figure 17: Number of deaf parents (red) vs. hearing parents (blue).



The sample is limited in number so we don't intend to neither discredit nor confirm firmly any theory but we want to depict a sample picture of the situation interviewees have experienced studying.

5.1 Qualitative analysis

Question1: Hai frequentato un corso di laurea magistrale?

Question2: Quale corso di laurea magistrale hai frequentato?

As said in the first chapter of this work, the number of deaf students who decides to attend university is quite scarce. ISTAT calculated that in spite of an increase in the amount of non-hearing people enrolled in university, the number of auditorily impaired post secondary students in Italy in the academic year 2004-2005 was 542.

Table 24: Have you attended any bachelor degrees?

	Frequenza Assoluta	Frequenza Relativa
SI'	5	33,3
NO	10	66,7

The percentage of interviewees who declared to have attended a graduate (MA and beyond) level university course, the 33.3%, is perfectly consistent with this data. As a matter of fact, it has already been highlighted how the higher it is the academic degree we take under consideration, the lower is the number of deaf (and in general of disabled) students we find enrolled.

The disciplines undertaken by the components of our sample are various and don't suggest any real trend in the academic choice of auditory impaired students. They are:

- Scienze dell'educazione degli adulti e formazione continua
- Strategia, management e controllo
- Ingegneria gestionale
- Teatro, cinema, danza e arti digitali
- Banche ed intermediari finanziari

Question3: Quali supporti ti sono stati forniti per facilitarti a frequentare i corsi universitari?

Universities in Italy offer three main types of support to help deaf students enrolled in courses.

Table 25: Which aids did you exploit during your University courses?

	Frequenza Assoluta	Frequenza Relativa
Interprete LIS	7	46,7
Supporti visivi	2	13,3
Tutor per prendere appunti	2	13,3
Altro	4	26,7

The Italian – LIS interpreter is by far the most useful and requested support. Not only does it help students follow in the classroom and keep up with the subject taught during the lessons but it also allows an easier communication between the student and the teacher as well as the rest of the class. Feeling part of the class and being at ease during course hours has been studied to be one of learning key factors.

Visual supports and note takers are also pivotal in deaf students' learning. Having aids coming directly from teachers and lecturers is very important to get a first-hand idea of the subject taught and the teacher's vision. Furthermore, being it very hard for auditory impaired students to follow the LIS interpreter while taking notes, it becomes

essential to have notes of the teacher's lecture taken and get visual support from the lecturer.

Question4: Quale dei supporti ti è stati più utile?

Table 26: Which one was the most useful aid?

	Frequenza Assoluta	Frequenza Relativa
Interprete LIS/Internazionale	5	33,3
Tutor	3	20
Supporto visivo	2	13,3
Non avevo supporti	2	13,3
Non risposto	3	20

As we expected, the most useful aid for deaf students in universities appears to be the Italian-LIS interpreter. In an environment like the academic one, sharing ideas and doubts become pivotal to the whole learning process. The interpreter allows fluent communication with both colleagues and teachers and facilitates the acquisition of new concepts.

The importance of tutors (or note-takers) and visual aids is also shown in the charts.

Unfortunately, 13,3 % of our interviewees declared that they hadn't had any additional support during their course of their post secondary studies. This data suggest that Italian universities are still struggling to tear down learning barriers but also that the path to complete accessibility is still long.

Question5: Hai frequentato corsi di lingua inglese?

Question6: Quali supporti avevi durante I corsi di lingua inglese?

Question7: Quali supporti ti sono stati più utili durante I corsi di lingua inglese?

Figure 17: Did you attend any English courses?



Of the 10 interviewees who declared to have attended English language courses at university, only 3 had an English-sign language interpreter provided. Whereas it is true that the interpreter should not interfere with the contact with the new language, a communication facilitator is to be considered essential for language explanations, requests and free communication. However, finding an interpreter who has good knowledge of both English and Italian sign language in Italy is not so easy.

Moreover, as shown by the chart above, the interpreter keeps on being considered the most useful aid for deaf students learning a second

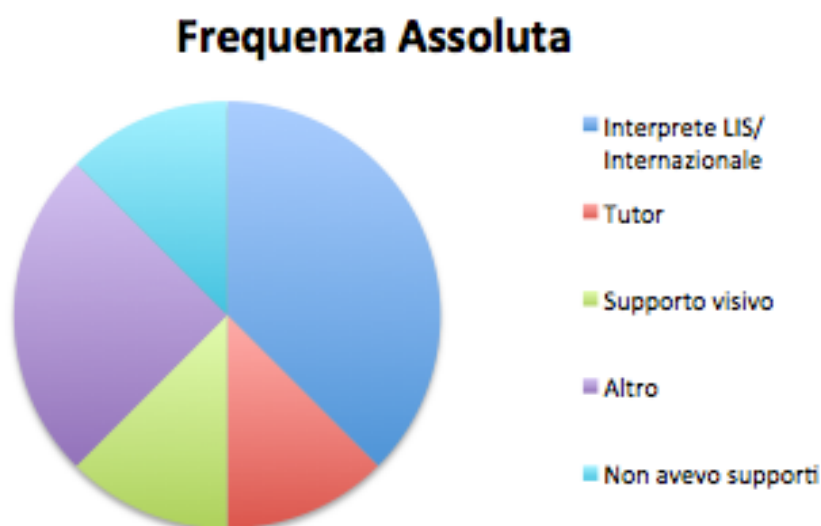
language, whereas tutors and visual supports maintain a secondary position.

Table 27: Which aid did you exploit during University English courses?

	Frequenza Assoluta	Frequenza Relativa
Interprete LIS/Internazionale	3	20
Tutor	1	6,7
Supporto visivo	1	6,7
Altro	5	33,3
Non ho frequentato corsi di inglese	5	33,3

Finally, as shown by the graph below, the trend of most useful aids for deaf students is in line with the one of general courses.

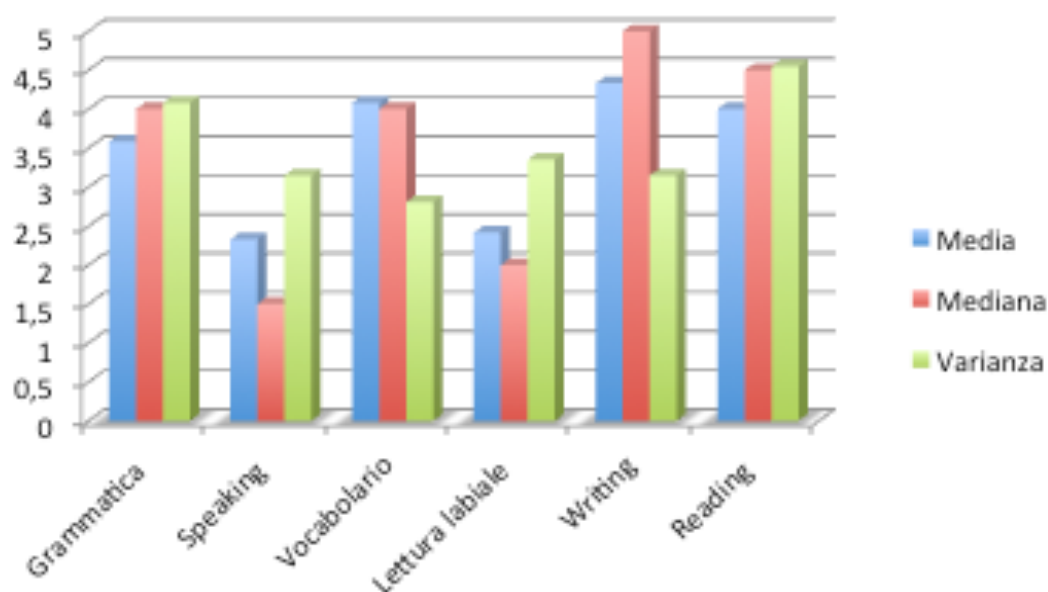
Figure 18: Which aids were more useful during your English courses?



Question 8: Dai un voto da uno a sette a queste abilità nell'ambito della lingua inglese in base a quanto sei migliorato all'università:

- Conoscenza della grammatica
- Produzione orale
- Vocabolario
- Lettura del labiale inglese
- Produzione scritta
- Comprensione scritta

Figure 19: English language improvement in university self-evaluation (1-7)



The graph above shows the average, median and variance value of the interviewees' answers. Being the average and median rather close in most cases, the values showed are quite consistent. It is also clear that the data we collected are quite distant one from an other – as shown from the variance value- and that all skills have been described with the whole range of values.

English speaking and lip-reading are the most difficult second language skills to be improved in an academic environment. Their average value lies around 1,5/2 points, showing a very scarce improvement during university. This is consistent with the findings reported from the literature review in the previous chapters. These are generally more challenging for deaf students learning a second language.

Vocabulary, reading and writing are on contrary, reported to improve through attending university courses,. This is probably because they are more accessible disciplines for auditory impaired students and are also used as a bridge for those people who can't hear. However, as we explained in chapter 4, this result does not mean that reading and writing skills are easily acquirable by deaf students in general, but rather show an improvement of those abilities in the course of university studies.

Question 9: Quale punteggio hai ottenuto all'esame di lingua inglese?

Question 10: Hai dovuto fare l'esame d'inglese più di una volta? Se sì, quante?

Figure 20: Did you have to take your English language exam more than once?



As shown in the chart, 50% of our interviewees had no problems passing their own English exam the first time they passed it. Of the ones who declare to have tried the English language exam more than once, only one declared he/she needed to take the exam twice.

The majority of our interviewees had a Pass/Not passed English exam. Therefore, it is not possible to give an overview of the results on a graduate scale. Only one of the interviewees passed his/her exam with the highest score possible, whereas the others have been assessed with a grade between 60% and 73%.

Table 28: What was your English exam outcome?

Voto in valori assoluti	Voto in valori relativi	N. Intervistati
20/30	66,7	1
28/28	100	1
73/100	73	1
70/100	70	1
6/10	60	1
Buono		1
Idoneità		5
Non ancora ricevuto		1
Vuoto		2

Question 11: Cosa non ti è piaciuto del corso di lingua inglese a livello di apprendimento della lingua?

Question 12: Cosa non ti è piaciuto del corso di lingua inglese a livello personale?

These questions have been analyzed together due to a confused interpretation of our interviewees.

The data we collected show a general disappointment with the relationship deaf students were able to develop with the teacher and a negative attitude of lecturers in communicating with non-hearing people. It has to be said that, since deaf students are still very few in the Italian university, teachers may lack in experience more than knowledge of the approach. Of great interest and also related to this issue is also the lack of supports in the English classroom reported from our sample. It is hoped that the more post-secondary studies will be made accessible to auditory impaired students, the more teachers will be prepared to deal with them.

Table 29: What didn't you like of your English language courses?

	Frequenza Assoluta	Frequenza Relativa
Difficoltà di lettura del labiale	3	17,6
Interprete non conosce la lingua inglese	1	5,9
Esercizi solo scritti	1	5,9
Scarso interesse del docente	4	23,5
Mancanza di supporti	3	17,6
Classi troppo numerose	1	5,9
Il corso non è stato utile/troppo difficile.	2	11,8
Vuoto	2	11,8

English lip-reading is obviously a big issue too. Not only does it add a further problem to an ability already difficult in Italian, but it is also worsen from the great number of students present in university courses and the distance between who talks and the lip-reader.

Question 13: Cosa cambieresti nello svolgimento delle lezioni di lingua inglese?

Table 30: What would like to change in your English language course?

	Frequenza Assoluta	Frequenza Relativa
Studio della fonetica	4	26,7
Interprete ASL o BSL	2	13,3
Tutor specifici	1	6,7
Lezioni specifiche per studenti sordi	4	26,7
Modalità di apprendimento differenti	1	6,7
Vuoto	3	20

When asked about possible changes in the English courses, 26,7% of the interviewees seem to believe in the separation of deaf students from the hearing group. This belief goes actually in the opposite direction of this research, in which we are trying to outline the characteristics of a working inclusive language classroom. We suppose that this thought comes from the difficult situation that deaf students experience nowadays, being the inclusive method still not completely developed.

Very important seem to be also a basic learning of English phonetics, which would match the initial approach deaf people experience with the Italian language in the first school years. This data shows a great interest of deaf students in learning not only the written language but also the oral one.

Moreover, interesting for more than the 13% of the component of our sample would be learning a second sign language, in addition or instead of the oral English one.

Question 14: Di quali modifiche agli esami di lingua inglese hai potuto usufruire?

The majority of the interviewees wasn't offered any variation on their English language exam whereas 14,3% reported to have had to pass only the written part.

Table 31: Which variations were you offered during your English exams?

	Frequenza assoluta	Frequenza relativa
Nessuna modifica	5	35,7
Ho svolto solo prove scritte	2	14,3
Parole scandite nel listening	1	7,1
Modifiche nel test di grammatica, produzione scritta e orale	1	7,1
Non risposto	5	35,7

Only one person had the chance of assess his/her oral comprehension ability. To do that he or she was offered a special tutor who enunciated the listening script and was therefore allowed lip-reading from a close distance.

Question 15: A che età hai imparato la LIS?

Question 16: Conosci altre lingue dei segni?

Question 17: Se conosci altre lingue dei segni, quali conosci?

In my sample, 5/14 students had acquired LIS from birth, so that for these speakers LIS is their L1. An additional 3 studied the Italian sign

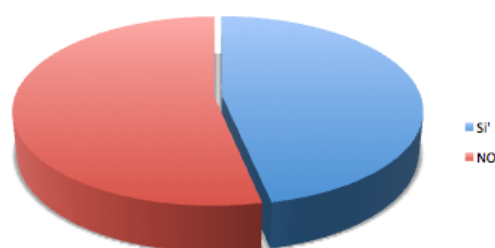
language at school, whereas the remaining 7 others had never learned it.

Table 32: When did you learn Italian Sign Language?

	Frequenza Assoluta	Frequenza Relativa
Dalla nascita	5	33,3
7 anni	2	13,3
16 anni	1	6,7
23 anni	1	6,7
Non la conosco	5	33,3
Vuoto	1	6,7

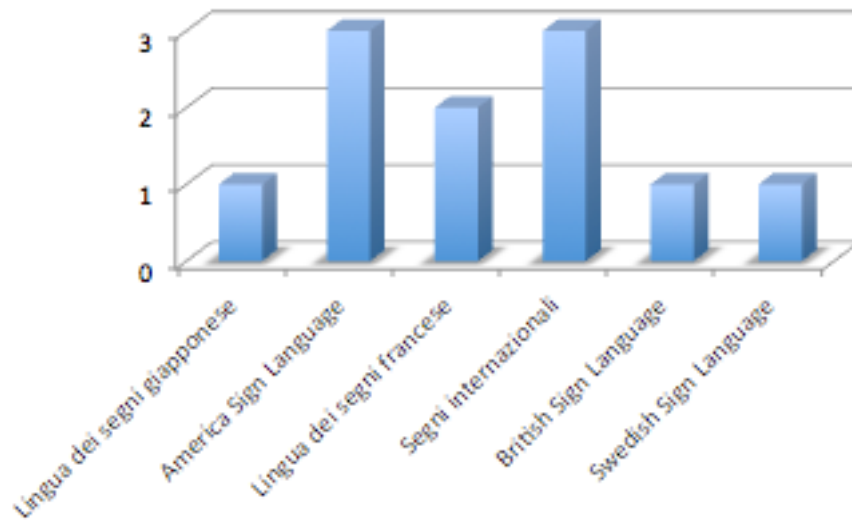
Seven of the interviewees reported to have some knowledge in at least one additional sign language other than LIS and 3 of them reported knowing more than two of them.

Figure 21: Do you know any other sign languages?



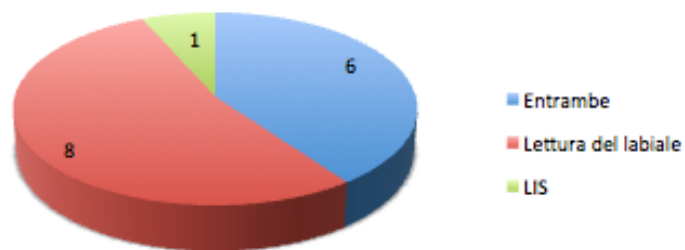
The range of the languages known by our sample is quite varied. International Sign Language and American Sign Language are the most studied ones but the interviewees showed an interest also in Japanese Sign Language, French Sign Language, British Sign Language and Swedish Sign Language

Figure 22: Which other sign languages do know?



Question 18. Nel tuo percorso di apprendimento hai utilizzato maggiormente la lingua dei segni o la lettura del labiale?

Figure 23: Did you use more lip-reading or sign languages during university?



Only one of our interviewees reported that Italian sign language was used as the only language of learning in his or her course of study. The majority of the people who took part in our research declared that lip-

reading and Italian spoken language have been mostly used as languages of instructions and explanations. Six people out of 15 finally reported that both LIS and Italian oral language were used during school and university.

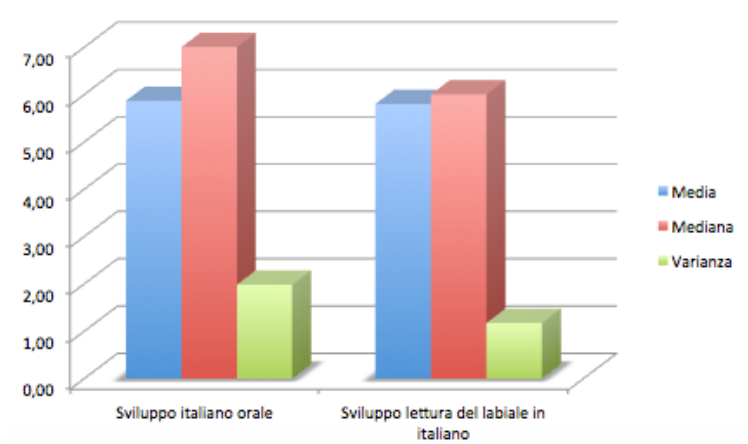
Question 19: Quanto è sviluppato il tuo italiano orale?

Question 20: Quanto è sviluppata la tua capacità di lettura del labiale in italiano?

As shown in the graph below, the average and median values in both questions are rather high whereas the variance is quite low. These data suggest that, at least as far as our sample is concerned, the oral Italian language is highly considered and studied by deaf people.

As a matter of fact, nowadays it is still more common for a non-hearing person to learn to lip-read and to talk before learning any sign language. This probably depends on both an old mentality that saw signing as an obstacle to learning and on the need for deaf people to be autonomous individuals in their everyday life.

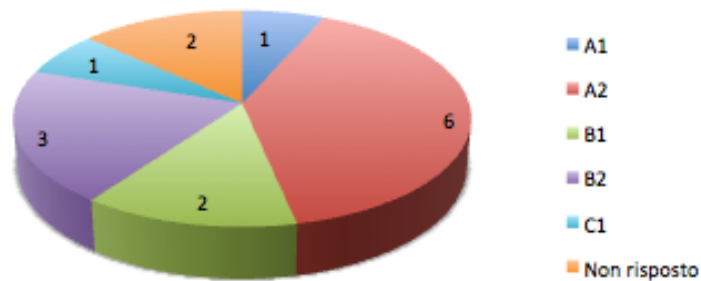
Figure 24: Italian oral language and lip-reading self-evaluation



Question 21: A quale livello di inglese sei arrivato alla fin del tuo percorso universitario?

To answer this question we asked our interviewees to make reference to the Common European Framework of Reference for Languages. Six out of the 15 people in our sample reached the A2 language level after their university path. Broadly speaking, more than 75% of our interviewees placed him or herself between the A2 and the B2 level of the Common European Framework of Reference for Languages.

Figure 25: Which language level did you reach at the end of University?

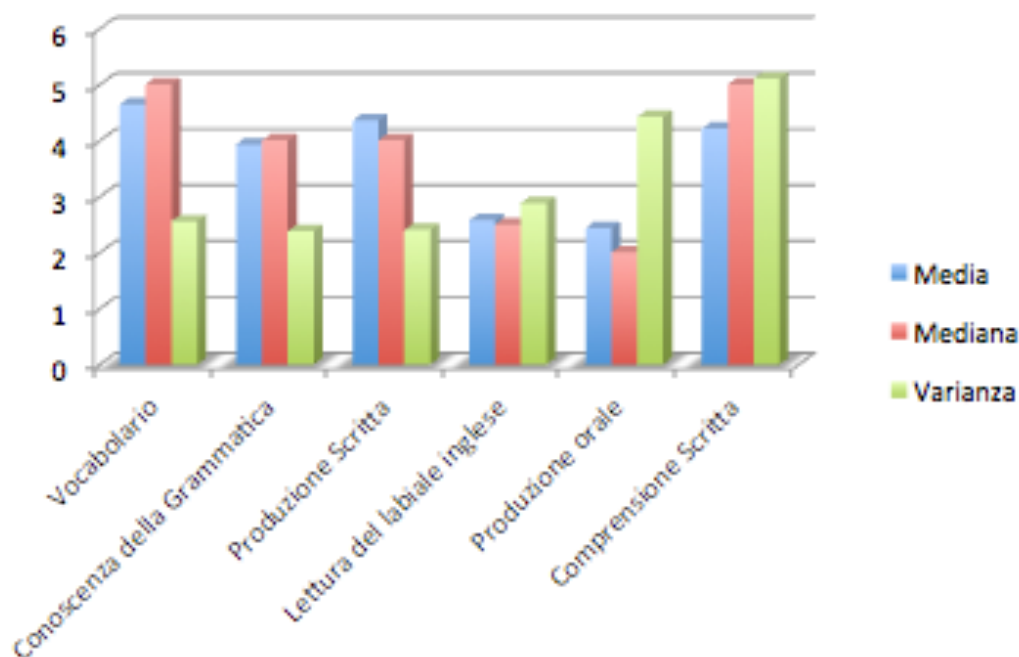


Question 22: Dai un voto da uno a sette alle tue capacità attuali in queste abilità di lingua inglese:

- Vocabolario
- Conoscenza della grammatica
- Produzione scritta
- Lettura del labiale inglese
- Produzione orale
- Comprensione scritta

As shown in the graph below, the abilities in which the people in our sample seem to be less capable are English lip-reading and oral production. As far as the latter is concerned, it is important to underline the high value of variance resulted from our data. This

Figure 26: English skills self-evaluation (1-7)



means that even though the average grade in the section of oral production is almost 2 (the median value is a little less than 2) the values reported by each of the interviewees are various and reach very high and very low points.

Vocabulary, grammar and written production seem to be the sections on which the majority of the components of our sample agree to have a higher level of knowledge.

Question 23: Dai un voto da uno a sette al queste abilità di lingua inglese in base alla loro difficoltà:

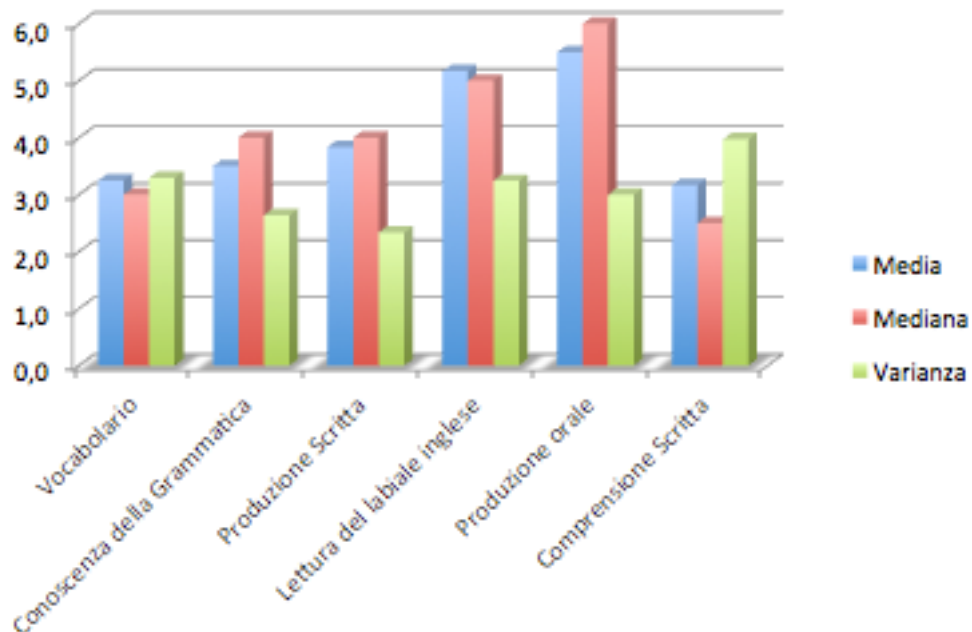
- Vocabolario

- Conoscenza della grammatica
- Produzione scritta
- Lettura del labiale inglese
- Produzione orale
- Comprensione scritta

As we expected, of very difficult acquisition for our interviewees seem to be English oral production and English lip-reading.

What appears to be more interesting though, is the high value of variance in the written comprehension section, which testifies a great disagreement in the amount of effort spent to acquire this skill. This comes as no surprise to us: as already said in the previews chapter of this work, written comprehension and production are no easy abilities for deaf people, who receive a scarce language input both quantitatively and qualitatively.

Figure 27: English skills difficulty (1-7)



5.2 Data analysis and results

The following paragraphs will answer the research question we presented at the beginning of this chapter. We will try to give a general explanation of the data reported in each and every chart.

Does Italian sign language interfere with Italian production or Italian lip-reading skills?

To study the dependency of sign language learning and the development of the oral Italian language, we linked the data resulting from question 19 and 20 to the ones of question 15.

Table 33: Oral Italian Self-Evaluation / What age did you learn Italian Sign Language?

	Dai un voto al tuo italiano orale					
A che età hai imparato la lis?	3	4	5	6	7	Importo totale
Dalla nascita	1	2	2			5
7 anni					2	2
16 anni					1	1
23 anni					1	1
Non la conosco			1	1	3	5
ND					1	1
Importo totale	1	2	3	1	8	15

As shown in the charts below and above, there seems to be a link between the age in which deaf people learnt the Italian sign language and the development of their oral language and ability to lip-read.

Once deaf people start signing and communicating, sign language becomes their L1 and the need to learn the oral language take a

second place. Despite the fact that this has been seen as a problem in the past (specially after what is known as the Milan Conference), there's no need for a deaf person to learn Italian oral language and lip-reading fluently, unless they don't feel the need to. As we discussed in the previous chapter, pivotal for second language learning is a strong L1 on which building the L2. Being sign languages natural, this process is totally accessible.

Table 34: Italian lip-reading Self- Evaluation / When did you learn Italian Sign Language?

	Voto all'abilità di lettura del labiale italiano					
A che età hai imparato la LIS	4	5	6	7	ND	Importo totale
Dalla nascita	1	2	2			5
7 anni		1		1		2
16 anni		1				1
23 anni				1		1
Non la conosco			2	3		5
ND	1				1	2
Importo totale	2	4	4	5	1	16

After examining Italian oral skills, we decided to take a step forward and investigate the second language oral abilities of the deaf people in our sample, in relation to the age at which they learn the Italian sign language.

Table 35: English oral production Self-Evaluation / When did you learn Italian Sign Language?

	Che voto daresti alle tue abilità di produzione orale inglese?								
A che età hai imparato la lis?	0	1	2	3	4	5	6	7	Importo totale
Dalla nascita		3	2						5
7 anni	1					1			2
16 anni		1							1
23 anni							1		1
Non la conosco	1		1	1	1	1			5
ND								1	1
Importo totale	2	4	3	1	1	2	1	1	15

The charts above and below suggest that English lip-reading results a little easier than English oral production to deaf people. This obviously depends on a much higher exposure to spoken English (and therefore a much higher use of lip-reading) through television and Internet. However, according to our predictions, both tables show very low values.

Moreover, until recently English oral language has been often put aside in favor of a deeper written language teaching and learning. We hope that according to the needs and desire of deaf people entering English as second language classrooms, universities will be able to offer more oral language learning opportunities.

Is the number of sign languages learned related to age of hearing loss?

Is it related to the age in which deaf people learn LIS?

Only people deaf by birth (7 in our research) reported to be able to sign in other sign languages than the Italian one.

The people who can sign in other languages are actually the ones who learnt LIS before: 5 of them learnt it right from birth whereas the other 2 learnt it at 7 years of age.

We believe that this data show nothing more than the fact that sign languages are to be considered languages by all means and that signers are curious and active sign languages users, in need of communication with both foreign and non-foreign people. For this reason, we think that the possibility of learning other sign languages in university should be offered as an alternative choice to the oral ones.

Table 36: Do you know any other sign languages?/ When did you learn Italian sign Language?

	Conosci altre lingue dei segni?			
A che età hai imparato la lis?	NO	SI'	(vuote)	importo totale
16 anni		1		1
23 anni		1		1
7 anni			2	2
Dalla nascita			5	5
ND		1		1
Non la conosco		5		5
importo totale		8	7	1
				16

Do deaf people who attend a master's degree know and use the Italian sign language?

Of the ones deaf by birth, only four people out of ten attended a master degree program after finishing their bachelor. Even if no one of our interviewees reported to have attended a language master degree, we wanted to investigate whether the ability to go on with university studies after the first degree is somehow related to the sign language knowledge.

Table 37: Did you attend any master degree programs? / When did you learn Italian Sign Language?

A che età hai imparato la lls?	Hai frequentato una laurea magistrale		Importo totale
	NO	SI'	
Dalla nascita	4	1	5
7 anni	1	1	2
16 anni	1		1
23 anni	1		1
Non la conosco	2	3	5
ND		1	1
Importo totale	9	6	15

Unfortunately, being our sample very small, we didn't find any strong relation between LIS learning and the attendance of master degree course. However, we believe that all deaf students, with the right support can reach any level of education that he or she intends to reach.

Following which aids do deaf students reach a master degree?

The aids exploited from the students in our sample are quite various. To study what support is more useful for a university career, we tried to find a relation between the aids that deaf people received in their first years of university and their attendance to master degree programs.

Table 38: Which aid were you offered during your University courses? / Did you attend any master degree programs?

	Supporti durante i corsi					
Hai frequentato una laurea magistrale? Quale?	Altro	Interprete LIS	Supporti visivi	Tutor per gli appunti delle lezioni	(vuote)	Importo totale
NO	2	5	1	1		9
SI'	1	2	1	1	1	6
Banche e intermediari finanziari		1				1
Giurisprudenza - Laurea a ciclo unico			1			1
Ingegneria gestionale	1					1
Scienze dell'educazione degli adulti e formazione continua					1	1
Strategia, management e controllo				1		1
Teatro, cinema, danza e arti digitali		1				1
(vuote)					2	2
Importo totale	3	7	2	2	2	16

From the data we collected, it seems that all the aids exploited by the students of our sample were useful in order to undertake a master degree program.

We hope that in the future the system will offer these same aids smoothly once the students present their medical reports, instead of asking for further applications or requests. What we noticed during our research is in fact that deaf students tend to be more disoriented than

their normal peers when it comes to bureaucracy and university organization.

What aid works best in deaf second language teaching?

The highest levels of English language competence in reference to the Common European Framework of Reference for Languages are related to the exploitation of an English-LIS interpreter or a note taker. Again, our sample is too small to make strong suppositions and all aids seem to have led to good accomplishments. We hope that more extensive research in the future will be able to investigate these aids further, in order to give the best support possible to deaf English language learners in universities.

Table 39: Which aid were you offered during your English courses? / Which level did you reach after your English courses?

	Che supporti avevi nei corsi di lingua inglese?					
A che livello sei arrivato grazie ai corsi di lingua inglese?	altro	Interprete inglese-LIS	Supporti visivi	Tutor per gli appunti	(vuote)	Importo totale
A1	1					1
A2	2		1		3	6
B1	1				1	2
B2		1		1	1	3
C1	1					1
(vuote)		2				2
Importo totale	5	3	1	1	5	15

Is the learning of a second language facilitated by a good language sign competence?

To answer the last one of our research questions we tried to look at the competence in Italian sign language of our interviewees and to relate it to the data we collected describing their ability in six different areas of the English language (Vocabulary, Grammar, Writing, Reading, Lip reading and Speaking).

Lip reading

Table 40: When di you learn Italian Sign Language? / English lip-reading Self-Evaluation

	A che età hai imparato la LIS?						
Lettura labiale	16 anni	23 anni	7 anni	Dalla nascita	ND	Non la conosco	Importo totale
1	1		1	3		1	6
2				1			1
3				1		2	3
4			1			1	2
5						1	1
6		1			1		2
Importo totale	1	1	2	5	1	5	15

English lip-reading is proved to be very difficult for all deaf people. However, people who started signing from birth seem to have reached a lower level of ability in this discipline. Even though the variables on which this data can depend are various and can be related to a lack of exposure to the oral foreign language or even a scarce interest in

learning it, it seems that being a native speaker of Italian sign language could influence the results obtained in the study of the oral English.

Oral production

Oral production values are very low in relation to very early sign language learning. However, there are also few people who didn't start signing until 16 years of age or who still can't sign, who reported to have reached a very low level of oral language. Even considering how limited is our sample, we can't avoid addressing the poor level that people who sign from birth in English oral language.

The data collected in this research are still not enough to formulate any valid hypothesis; we hope that a further and wider research will be conducted following this one.

Table 41: When did you learn Italian Sign Language? / English oral production self- evaluation

	A che età hai imparato la LIS?						
Produzione orale	16 anni	23 anni	7 anni	Dalla nascita	ND	Non la conosco	Importo totale
0			1			1	2
1	1				3		4
2					2	1	3
3						1	1
4						1	1
5			1			1	2
6		1					1
7					1		1
Importo totale	1	1	2		5	1	5

A part from a few exceptions the people in our sample seem to agree on a written comprehension ability value, which lies between 2 and 5 out of 7.

As explained before, written production is usually very difficult to master for deaf people, who have not been exposed to the language and therefore, have no linguistic input to translate into written words. The similarity of our results between native signers and non-native signers lies in the fact that sign language doesn't help as far as writing is concerned. Supposing that writing is the conveyance of words to a dissimilar code, which code would be the input one for a deaf person who is learning the English language? Surely not the Italian or British or American sign languages, since they have no written forms. We must be talking, therefore, of the English oral language, a language that either native signers or non-native signers have never been exposed to.

Table 42: When did you learn Italian Sign Language? / English written production self- evaluation

	A che età hai imparato la LIS?							
Produzione scritta	16 anni	23 anni	7 anni	Dalla nascita	ND	Non la conosco	Importo totale	
1	1							1
2					1			1
4			2		2		2	6
5					2	1		3
6		1					2	3
7							1	1
Importo totale	1	1	2		5	1	5	15

Written comprehension

Written comprehension seems to be one of the easier abilities to master, only a few of the native signer in our sample reported to have very low skills in this area in fact.

As we saw, written language is not, however, to be considered as a totally effortless ability for deaf people: the passage between the

orthographic and the phonetic code becomes challenging especially when it comes to punctuation whereas functional elements and connectors are very difficult to be recognized since they are not marked in oral language and don't exist in sign languages.

Written English is therefore linked somehow to the oral competence, being it a mental transposition of written words.

We suggest that a good English phonetic instruction would facilitate the process of reading as well as the oral ones.

Table 43: When did you learn Italian Sign Language? / English written comprehension self- evaluation

	A che età hai imparato la LIS?						
Comprensione scritta	16 anni	23 anni	7 anni	Dalla nascita	ND	Non la conosco	Importo totale
0			1				1
1	1			1			2
3				2			2
4						1	1
5				1		1	2
6		1	1	1	1	2	6
7						1	1
Importo totale	1	1	2	5	1	5	15

Grammar knowledge

Value distribution for grammar doesn't seem to highlight a real difference between native signers and non-native signers.

We believe that this is easily explainable with the fact that grammar can be taught and learnt through any code (sign language, oral Italian.. and its learning on its own requires mostly a mnemonic effort.

Table 44: When did you learn Italian Sign Language? / Grammar knowledge self- evaluation

	A che età hai imparato la LIS?						
Grammatica	16 anni	23 anni	7 anni	Dalla nascita	ND	Non la conosco	Importo totale
1	1						1
2				2			2
3			1				1
4			1	1		3	5
5				2	1	1	4
6		1					1
7						1	1
Importo totale	1	1	2	5	1	5	15

5.3 M's case

In the last part of the chapter, we will present the case of a deaf student who took part in an English university course, M.

M became deaf when she was 2 months old, following a serious illness and was never taught Italian sign language at home. Hence, she was encouraged from her family to learn how to lip-read and imitate others' mouth position to try to talk. Since she learnt LIS in elementary school, she can't be considered a native speaker of the Italian sign language.

M's competence of oral Italian language is now very good. She can easily lip-read a large amount of oral communication and speak fine, even though not excellent, Italian.

M decided to enroll in Ca' Foscari university in order to learn English as a second language and get a degree which would allow her to teach

English as a second language to deaf children. She also would like to go on with her profession of interpreter for blind-deaf people. Her wish is to be able one day to speak the global language with knowledge and fluency. Unfortunately, due to a problem with timing, M didn't have an English-LIS interpreter at her disposal, at least for the first semester, and had to attend English lessons, held in English, with an Italian-LIS interpreter.

What appeared clear from the beginning is that M has had a different and more complicated vision of university than her hearing peers. She has difficulties in course organization, in managing relationships with professors and with the various students' offices. Her confusion often leads to misunderstanding and subsequent barriers to her learning.

During her English lessons M needs a tutor and an interpreter, even though with her good ability in lip reading she manages to understand most of Italian conversations by herself. However, English lip reading keeps on being a very hard skill to master, especially in a big university classroom, where the teacher is not always close enough and has to talk to more than one student. Whereas the interpreter has the role to keep M in contact with explanations and corrections, the tutor is essential for M to do the exercises and try to use actively the second language. In a crowded university classroom in fact, it is nearly impossible for the teacher to correct everyone's exercise or listen to each and every student during speaking practice. The role of the tutor becomes pivotal for M to have direct contact with English, be able to look at mouth and tongue movement and be corrected when she talks.

M always asks for phonetic instructions in order to be able to pronounce new and old words in a proper way. The most useful tool in this instance is fingerspelling (FS), the Italian signed alphabet. The tutor

has started teaching M the International Phonetic Alphabet to make the process smoother, but up until now M prefers to rely on FS.

Writing exercises are the most difficult for M. She doesn't feel able to write long sentences and link them together. Every time she is asked to do this kind of exercises she gets really demotivated and frustrated and her written production results confused and unclear.

Reading exercises are the easiest kinds for her whereas she seems to have developed such a good relationship with her tutor that she actually enjoys speaking exercises and appears very curious and satisfied.

Allegedly, our experience with M took us to the same conclusions our research took us to and that will be presented in the following paragraph.

5.4 Discussion

Thanks to both our data our experience on the field, we were able to elaborate some key points in order to improve the conditions of deaf students who attend a language course a university.

First of all developing English programs with English phonetic instructions, would be useful not only to enhance oral and lip reading skills but also to help deaf students with their confidence and their motivation.

Secondly, as far as language classrooms are concerned, deaf people have been shown in need of various supports, especially interpreters and tutors/note-takers. The presence of both these figures is essential to allow the learner to have direct contact with the second language: the student should not only talk to the interpreter in his or her own sign language but have a contact with the foreign language through exercises and looking at the notes.

Finally, to facilitate the process of deaf students enrollment, universities could create a special educational path dedicated to them in order to help solving their initial disorientation and reduce waiting periods for different supports.

CONCLUSION

The main aim of this work was to examine dyslexic and deaf students university experience, focusing on students who are enrolled in a foreign language curriculum, and specifically English. Our main focus was to bring out merits and drawbacks post-secondary ESL courses, as far as impaired students needs are concerned.

The literature presented led formulating and evaluating realistic hypotheses, which were later tested through the administration of two questionnaires. This investigation did not have the ambition to illustrate the whole complexity of the reality of dyslexic and deaf students in University language curriculums but to give an outline of a general condition. Not everything was consistent with previous studies, mainly because the number of people who decided to take part in our research was too low.

15 dyslexic and 15 deaf students who attended university in Italy filled in the questionnaires we administrated. The data that we gained were used to answer the research questions we presented in the first chapter of this work.

7.1 Dyslexic Students

7.1.1 Findings

Assessing dyslexia at early stages in education both helps lowering the impaired students' rate of failures during their whole study path and allows learners to access compensation strategies and aids at a young age. Students are enabled to learn how to use different study approaches very early in their school years and get to university with a highly developed awareness of how to compensate their difficulties in each and every field and subject.

As far as language education is concerned, assessing students at a young age can encourage them to take special measures in order to overcome their language impairment. Our data show, for instance, that spending more than one month abroad strongly improves dyslexic students' English exams outcomes.

As far as university ESL exams are concerned, our data shows that dyslexic students perform better when they are offered additional time and the possibility to use a computer. They failed, on the other hand, to confirm the benefits of sole additional time exploitation.

The best way for dyslexic students to prepare themselves for English language exams seem to be studying alone: students can only in this way follow their own rhythm and create a study environment free from distractions.

Finally, our data showed that the biggest issues that language impaired students have to face during ESL exams are dyslexia related anxiety and dealing with the length of the exam itself.

7.1.2 Recommendations

For all these reasons we think that for a better outcome of dyslexic students college language education a few of the measures listed below should be followed and respected:

It is pivotal to instruct teachers and parents to be able to recognize early signs of dyslexia in children. Being early diagnosed will help students in leaning instruments and study aids that will help them throughout their whole education path.

Dyslexic students should be allowed all devices needed in order cope with their impairment in the best way possible at all level of education, in order to facilitate their learning and avoid anxiety feeling related to failure.

Dyslexic students, parents and teachers should be informed about the importance of language immersion in second language education.

7.2 Deaf Students

7.2.1 Findings

Our data seem to indicate that people who use the Italian Sign language are actually less able to lip-read and produce the Italian oral language. As far as English is concerned, oral production and lip-reading are considered difficult skills from both oralist and manualist people, which is not surprising, since oral and auditory abilities in second language teaching for deaf people are usually ignored.

The number of sign languages known by each person seems to have a link with the age of hearing loss and learning of Italian Sign Language. Only people deaf by birth or who became deaf before turning eight are able to communicate in a sign language other than the Italian one. Those people can usually speak more than one foreign sign language.

There seem to be no connection between Italian Sign Language use and attending a master's degree program. Of course, the type of master's degree taken into consideration and/or a bigger research sample could change this result. Moreover, having an Italian-LIS interpreter, visual aids and a note taker seem to be what more help deaf people to reach higher levels of education.

As far as ESL is concerned, deaf people reach higher grades in exams when they can follow lessons with both an English-LIS interpreter and a note taker. The presence of both these support figures is essential to allow the learner to have direct contact with the second language.

The only two English disciplines that show a different level of competence between signers and non-signers are English lip-reading and oral language production. English lip-reading is proved to be very difficult for all deaf people. However, people who started signing from birth seem to have reached a lower level of ability in this skill. Oral production values are very low in relation to very early sign language learning. However, there are also few people who didn't start signing until 16 years of age or who still can't sign, who reported to have reached a very low level of oral language.

A part from a few exceptions the people in our sample seem to agree on a written comprehension ability value, which lies between 2 and 5 out of 7. The similarity of our results between native signers and non-native signers lies in the fact that sign language doesn't help as far as

writing is concerned. Written comprehension seems to be one of the easier abilities to master, only a few of the native signer in our sample reported to have very low skills in this area in fact.

Value distribution for grammar doesn't seem to highlight a real difference between native signers and non-native signers.

7.2.2 Recommendations

The deaf students in our sample declared that they would like to have more opportunities to learn English phonetics and phonology, in order to enhance their oral and lip reading skills, as well as help them with their confidence and their motivation.

Furthermore, to facilitate the process of deaf students enrollment, universities could create a special educational path dedicated to hearing impaired learners in order to help solving their initial disorientation and reduce waiting periods for different supports.

7.3 Limitations

It has to be noticed that the study presented in this work has been conducted on a small sample of dyslexic and deaf students from different part of Italy, who decided voluntarily to take part in this research.

7.4 Future directions

We wish that future researches would investigate this subjects further. The availability of a larger sample would allow confirming or denying, for instance, our findings, in order to evaluate new possible support measures and strategies.

We would also like to extend our research to other languages already studied at the University level in Italy, to verify whether different languages and alphabets may modify our findings.

Finally, more precise diagnostic criteria – we discuss self-reported dyslexia and deafness diagnosis – would be beneficial to the preciseness of further researches.

REFERENCES

- Arosio, et al. (2017). *The comprehension of Italian relative clauses in poor readers and in children with Specific Language Impairment* in GLOSSA: A JOURNAL OF GENERAL LINGUISTICS, vol. 9, pp. 1–25
- Ajello, R., Marotta, G., Mazzoni, L., & Nicolai, F. (2002). *Morphosyntactic fragility in the spoken and written Italian of the deaf* in: FAVA, E. (ED.), CLINICAL LINGUISTIC: THEORY AND APPLICATIONS IN SPEECH PATHOLOGY AND THERAPY, vol. 1, pp. 49–74
- Arosio, et al. (2017). *The comprehension of Italian relative clauses in poor readers and in children with Specific Language Impairment* in GLOSSA: A JOURNAL OF GENERAL LINGUISTICS, vol. 9, pp. 1–25
- Battacchi, M.W., Gaines, R., & Montanini Manfredi, M. (1991). *Codici di memoria, abilità di lettura, in bambini sordi italiani* in PENSIERO E COMUNICAZIONE NEI BAMBINI SORDI, Bologna, Cooperativa Libreria Universitaria, pp. 47-8
- Berent, G. P. (2001). *International Seminar on Teaching English to Deaf and Hard-of-Hearing Students at Secondary and Tertiary Levels of Education: Proceedings*, pp. 124-134
- Bertone, C., & Volpato, F. (2009). *Oral language and sign language: possible approaches for deaf people's language development*. in CADERNOS DE SAÚDE, vol. Especial, Linguagem Gestual, pp. 51-62
- Bertone, C., & Volpato, F., (2012). *Le conseguenze della sordità nell'accessibilità alla lingua e ai suoi codici* in ELLE, vol. 3
- Blamey, P.J., Sarant, J.Z., Paatsch, L.E., Barry, J.G., Bow, C.P., Wales, R.J., et al. (2001). *Relationships among speech perception, production*
- Cantiani, C., Lorusso, M.L., Perego, P., Molteni, M., & Guasti, M.T. (2013). *Event-related potentials reveal anomalous morphosyntactic processing*

in developmental dyslexia in APPL. PSYCHOLINGUIST, vol. 34, pp. 1135–1162

Capozzi, F., Casini, M. P., Romani, M., Gennaro, L. D., Nicolais, G., & Solano, L. (2007). *Psychiatric comorbidity in learning disorder: analysis of family variable* in CHILD PSYCHIATRY HUM. DEV., vol. 39, pp. 101–110

Cardinaletti, A., & Volpato, F., (2015). *On the comprehension and production of passive sentences and relative clauses by Italian university students with dyslexia*, Structure, Strategies, and Beyond: Studies in Honour of Adriana Belletti, Amsterdam, John Benjamins Publishing Company, pp. 279-301

Carroll, J. M., & Iles, J. E. (2006). *An assessment of anxiety levels in dyslexic students in higher education* in BR. J. EDUC. PSYCHOL., vol. 76, pp. 651–662

Caselli, M.C., Maragna, S., Pagliari Rampelli, L., & Volterra, V. (1994). *Linguaggio e Sordità*, Firenze, La Nuova Italia

Caselli, M.C., Rinaldi, P., Varuzza, C., Giuliani, A., & Burdo, S. (2012). *Cochlear implant in the second year of life: lexical and grammatical outcomes* in JOURNAL OF SPEECH, LANGUAGE, AND HEARING RESEARCH, vol. 55, pp. 382–394

Catts, H. W., & Kamhi, A. G. (1999). *Language and learning disabilities*. Allyn & Bacon, London

Catts, H. W., Fey, M. E., Tomblin, J. B., & Zhang, X. (2002). *A longitudinal investigation of reading outcomes in children with language impairments* in JOURNAL OF SPEECH, LANGUAGE, AND HEARING RESEARCH, vol. 45, pp. 1142–1157

Chafe, W.L. (1982). *Integration and Involvement in Speaking, Writing, and Oral Literature* in TANNEN, D. (ED.), SPOKEN AND WRITTEN LANGUAGE, pp. 35-54

Chesi, C. (2006). *Il linguaggio verbale non standard dei bambini sordi*, Roma: Edizioni Universitarie Romane

Clay, M. M. (1985). *The early detection of reading difficulties (3rd ed.)*, Auckland: Heinemann

- Clay, M. M. (1987). *Learning to be learning disabled* IN NEW ZEALAND JOURNAL OF EDUCATIONAL STUDIES, vol. 22(2), pp. 155–173.
- Conrad, R. (1979). *The Deaf Schoolchild*, Harper and Row, London
- Cornoldi, C. (1999), *Le difficoltà di apprendimento a scuola*, Bologna: Il Mulino
- Crain, S., Shankweiler, D., Macaruso, P., & Bar-Shalom, E. (1990). *Working memory and sentence comprehension: Investigations of children with reading disorder* in G. Vallar & T. Shallice (Eds.), NEUROPSYCHOLOGICAL IMPAIRMENTS OF SHORT-TERM MEMORY, Cambridge U.K: Cambridge University Press
- D'Este, C., & Ludbrook, G. (2013). *Fairness and validity in testing students with SpLDs: a case study from Italy*, Assessing L2 students with learning and other disabilities, Newcastle upon Tyne, Cambridge Scholars Publishing, pp. 169-188
- De Villiers, J., De Villiers, P., & Hoban, E.(1994). *The central problem of functional categories in English syntax of oral deaf children* in TAGER-
- De Villiers, P.A. (1988) *Assessing English syntax in hearing-impaired children: elicited production in pragmatically motivated, situations* in
- Delage, H., (2008) ÉVOLUTION DE L'HETEROGENEITE LINGUISTIQUE CHEZ LES ENFANTS SOURDS MOYENS ET LÉGERS: ÉTUDE DE LA COMPLEXITÉ MORPHOSYNTAXIQUE, Université François-Rabelais, Tours
- Delage, H., Tuller, L. (2007), *Language development and mild-to-moderate hearing loss: does language normalize with age?* in JOURNAL OF SPEECH, LANGUAGE AND HEARING RESEARCH, vol. 50, pp. 1300—1313
- Dettori, F. (2015). *Né asino, né pigro: sono dislessico. Esperienze scolastiche e universitarie di persone con DSA*, Milano: Franco Angeli
- Dodd, B. (1987). *Lip-Reading, Phonological Coding and Deafness* in Dodd, B.; Campbel, R. (ed.), *HEARING BY EYES: THE PSYCHOLOGY OF LIP- READING*, London: Lawrence Erlbaum, pp. 177-189

- Drum, D. J., Brownson, C., Burton Denmark, A., & Smith, S. E. (2009). *New data on the nature of suicidal crises in college students: shifting the paradigm* in PROF. PSYCHOL. RES. PRACT., vol. 40, pp. 213–222
- Facoetti, A., & Molteni, M. (2001). The gradient of visual attention in developmental dyslexia. *Neuropsychologia*, vol.39, p.p. 352-357
- Farukh A., & Vulchanova M. (2015). *L1, quantity of exposure to L2 and reading disability as factors in L2 oral comprehension and production skills* in LINGUA, vol 50, pp. 221-233
- Ferreira, F. (2003). *The misinterpretation of noncanonical sentences* in COGNITIVE PSYCHOLOGY, vol. 47, pp.164 –203.
- Flusberg, H., (1994). *Acquisition: Studies of Atypical Children*. Erlbaum, Hillsdale in CONSTRAINTS ON LANGUAGE, pp. 9–47
- Geers A, Spehar B, & Sedey A (2002). *Use of speech by children from total communication programs who wear cochlear implants* in AM J SPEECH LANG PATHOL, vol.11, pp. 50–58
- Geers, A.E., Moog, J.S., Biedenstein, J., Brenner, C., & Hayes, H. (2009). *Spoken language scores of children using cochlear implants compared to hearing age-mates at school entry* IN JOURNAL OF DEAF STUDIES AND DEAF EDUCATION, vol. 13, pp. 371–385
- Ghisi, M. et al (2016). *Socioemotional Features and Resilience in Italian University Students with and without Dyslexia* in FRONTIERS IN PSYCHOLOGY
- Gibson, E. (1998). *Linguistic complexity: locality of syntactic dependencies* in COGNITION, vol. 68(1), pp. 1-76
- Gregg, N., Hoy, C., King, M., Moreland, C., & Jagota, M. (1992). *The MMPI-2 profile of adults with learning disabilities in university and rehabilitation settings* in J. LEARN. DISABIL., vol. 25, pp. 386–395
- Halliday, M.A.K. (1992). *Spoken and Written Language*, Oxford: Oxford University Press
- Hammer, A. (2010). *The Acquisition of Verbal Morphology in Cochlear-Implanted and Specific Language Impaired Children* in LOT, Utrecht
- Harm, M.W., & Seidenberg, M.S. (1999). *Phology, Reading Acquisition*

and Dyslexia: Insights from Connectionist Models in *PSYCHOLOGICAL REVIEW*, vol. 106, pp. 491-528

Hatcher, J., Snowling, M. J., & Griffiths, Y. M. (2002). *Cognitive assessment of dyslexic students in higher education*, in *BR. J. EDUC. PSYCHOL*, vol. 72, pp. 119–133

ISTAT (2009). *La disabilità in Italia. Il quadro della statistica ufficiale*, a cura di Solipaca A. , centro stampa dell'Istat, Roma, vol. 37

Iversen, S., & Tunmer, W. (199). *Phonological processing skills and the reading recovery program*, in *JOURNAL OF EDUCATIONAL PSYCHOLOGY*, vol. 85, pp. 112-126

Jamieson, C., & Morgan, E. (2008). *Managing dyslexia at university: A resource for students, tutors and support services* , London : Routledge

Joanisse, M.F., Manis, F.R., Keating, P., & Seidenberg, M.S. (2000). *Language deficits in dyslexic children: Speech perception, phonology, and morphology* in *JOURNAL OF EXPERIMENTAL CHILD PSYCHOLOGY*, vol. 77(1), pp. 30–60

Kirby, JR, Silvestri, R., Allingham, B.H., Parrila, R., & La Fave, C.B. (2008). *Learning strategies and study approaches of postsecondary students with dyslexia*, in *J LEARN DISABIL*, vol. 41(1), pp. 85-96

Krashen, & Stephen D. (1987). *Principles and Practice in Second Language Acquisition*, Prentice-Hall International

Kretchmer, R.R., & Kretchmer, L.W. (1978). *Communication Assessment of Hearing-impaired Children: From Conversation to Classroom language, hearing loss, and age in children with impaired hearing* in *JOURNAL OF SPEECH, LANGUAGE, AND HEARING RESEARCH*, vol. 44, pp. 264—285

Lackaye, T. D., & Margalit, M. (2006). *Comparisons of achievement, effort, and self-perceptions among students with learning disabilities and their peers from different achievement groups* in *J. LEARN. DISABIL.*, vol. 39, pp. 432–446

Leikin, M., & Assayag-Bouskila, O. (2004). *Expression of syntactic complexity in sentence comprehension: A comparison between dyslexic and regular readers* in *READING AND WRITING*, vol. 17, pp. 801–822.

Lenneberg, E.H., (1967). *Biological Foundations of Language*, New York:

Wiley

Maragna S. (2000). *La sordità. Educazione, scuola, lavoro e integrazione sociale*, Milano: Hoepli

Mellon et al. (2015). *Should All Deaf Children Learn Sign Language?* in PEDIATRICS, vol. 136, pp. 170–176

Miyamoto, R.T. et al. (1999). *Communication skills in pediatric cochlear implant recipients* in ACTA OTOLARYNGOLOGICA, vol. 119, pp. 219–224

Mugnaini, D., Lassi, S., La Malfa, G., & Albertini, G. (2009). *Internalizing correlates of dyslexia* in WORLD J. PEDIATR, vol. 5, pp. 255–264

Neisser, A., (1983). *The Other Side of Silence: Sign Language and the Deaf Community in America*. New York: Knopf Print.

Nicholas, J.G.; & Geers, A.E. (2007). *Will They Catch Up? The Role of Age at Cochlear Implantation in the Spoken Language Development of Children with Severe to Profound Hearing Loss* in JOURNAL OF SPEECH, LANGUAGE, AND HEARING RESEARCH, vol. 50, pp. 1048-1062

Ong, W. (1982). *Orality and Literacy: The Technologizing of the Word*, Methuen, London. Trad. it. (1986), *Oralità e scrittura*, Bologna: Il Mulino

Pinnell, G. S. (1989). *Reading recovery: Helping at-risk children learn to read* in ELEMENTARY SCHOOL JOURNAL, vol. 90, pp. 161-184

Pizzoli, C., Lami, L., Palmieri, A., & Solimando, M. C. (2011). *Dislessia e fattori psicosociali: percorso accademico e benessere psicosociale in due campioni di dislessici giovani adulti* in PSICOL. CLIN. DELLO SVILUPPO, vol. 15, pp. 95–122

Plaut, D.C., McClelland, J.L., Seidenberg, M.S., & Patterson, K.E. (1996). *Understanding Normal and Impaired Word Reading: Computational Principles in Quasi-Regular Domain* in PSYCHOLOGICAL REVIEW, vol. 103, pp. 56- 115

Quigley, S. P., & King, C. M. , (1980). *Syntactic performance of hearing impaired and normalhearing individuals* in APPLIED PSYCHOLINGUISTICS, vol 1, pp. 329-356

Quigley, S.P., & Paul, P.V., (1984), *Language and Deafness.*, San Diego: College-Hill Press

- Riddick, B., Sterling, C., Farmer, M., & Morgan, S. (1999). *Self-esteem and anxiety in the educational histories of adult dyslexic students* in *DYSLEXIA*, vol. 5, pp. 227–248
- Rinaldi P. et al (2015). *Insegnare agli studenti sordi: aspetti cognitivi, linguistici, socioemotivi e scolastici*, Bologna: Il Mulino
- Rinaldi, P., & Caselli, C., (2009). *Lexical and grammatical abilities in deaf Italian preschoolers: the role of duration of formal language experience* in *JOURNAL OF DEAF STUDIES AND DEAF EDUCATION*, vol. 14, pp. 63-75
- Sabornie, E. J. (1994). *Social-affective characteristics in early adolescents identified as learning disabled and nondisabled* in *LEARN. DISABIL. Q.*, vol. 17, pp. 268–279
- Scanlon, D.M., Vellutino, F.R., Small, S.G., Fanuele, D.P., & Sweeney, J. (2003). *The short and long term effects of different types of early literacy intervention on reading comprehension*, Paper presented at the annual conference of the Society for the Scientific Study of Reading, Boulder, CO
- Schneider, E. and Crombie, M. (2003), *Dyslexia and Foreign Language Learning*, London: David Fulton Publisher
- Seymour, P.H.K., Aro, M., & Erskine, J.M. (2003). *Foundation literacy acquisition in European orthographies* in *BRITISH JOURNAL OF PSYCHOLOGY*, vol. 94, pp. 143–174
- Smith S.T., Macaruso P., Shankweiler D.A., & Crain S. (1989). *Syntactic comprehension in young poor readers* in *APPLIED PSYCHOLINGUISTICS*, vol. 10, pp. 429–454
- Spencer, L., Barker, B., & Tomblin, B., (2003). *Exploring the language and literacy outcomes of pediatric cochlear implant users* in *EAR AND HEARING*, vol. 24 pp. 236–247; *NEUROPSYCHOLOGY*, vol. 6, pp. 273--308.
- Swisher, M.V. (1989). *The Language-Learning Situation of Deaf Students*, *TESOL*
- Tomblin, J.B., Spencer, L., Flock, S., Tyler, R., & Gantz, B., (1999). *A comparison of language achievement in children with cochlear implants*

and children using hearing aids in JOURNAL OF SPEECH, LANGUAGE AND HEARING RESEARCH, vol. 42, pp. 497–511

Trovato, S. (2014). *Insegno in Segni. Linguaggio, Cognizione Successo Scolastico per gli Studenti Sordi*, Milano: Raffaello Cortina Editore

Tuller, L., (2000). Aspects de la morphosyntaxe du français des sourds. In RECHERCHES LINGUISTIQUES DE VINCENNES, vol. 29, pp. 143--156.

Undheim, A. M. (2003). *Dyslexia and psychosocial factors. A follow-up study of young Norwegian adults with a history of dyslexia in childhood*, in NORD. J. PSYCHIATRY, vol. 57, p. 221–226

Vellutino, F. R., & Scanlon, D. M., (1987a). *Phonological coding, phonological awareness, and reading ability: Evidence from a longitudinal and experimental study* in MERRILL-PALMER QUARTERLY, vol. 33, pp. 321-363

Verbist, A., (2010). *The Acquisition of Personal Pronouns in COCHLEAR-IMPLANTED CHILDREN*, Utrecht: LOT Series

Volpato F., & Vernice M. (2014). *The production of relative clauses by Italian cochlear-implanted and hearing children* in LINGUA, vol. 139, pp. 39-67

Volpato, F., (2010). *The acquisition of relative clauses and phi-features in hearing and hearing-impaired populations*. Università Ca' Foscari Venezia

Volpato, F., & Vernice, M. (2014). *The production of relative clauses by Italian cochlear-implanted and hearing children* in LINGUA, vol. 139, pp. 39-67

Volterra, V., & Bates, E., (1989). *Selective impairment of Italian grammatical morphology in the congenitally deaf: a case study* in COGNITIVE NEUROPSYCHOLOGY, vol. 6, pp. 273–308

Wasik, B. A., & Slavin, R. R. (1993). *Preventing early reading failure with one-to-one tutoring: A review of five programs*, READING RESEARCH QUARTERLY, vol. 28, pp. 179-200

Wiener, J., & Schneider, B. H. (2002). *A multisource exploration of the friendship patterns of children with and without learning disabilities* in J. ABNORM. CHILD PSYCHOL., vol. 30, pp. 127–141

Wiseheart, R, Altmann, L. J. P., Park, H., & Lombardino, L. J. (2009). *Sentence comprehension in young adults with developmental dyslexia* in ANNALS OF DYSLEXIA, vol. 59(2), pp. 151-167

Young, G.A., & Killen, D.H., (2002). *Receptive and expressive language skills of children with five years of experience using a cochlear implant* in ANNALS OF OTOLARYNGOLOGY LARYNGOLOGY, vol. 111, pp. 802—810

SITOGRAPHY

Benito, S., (2016). *Alexander Graham Bell and the Deaf Community: A Troubled History*, pp 1-2, Web. 27 May 2016

APPENDIX A: DYSLEXIC STUDENTS' QUESTIONNAIRE

Dislessia e Università

Esami di Lingua Inglese

* Required

1. Dove frequenti l'università? *

2. In che modo ti prepari agli esami di lingua inglese dell'università?

Mark only one oval.

- Utilizzo mappe concettuali
- utilizzo software compensativi
- Frequento lezioni private
- Studio da solo
- Studio in gruppo

3. Quante volte hai svolto l'esame OFA del CLA? (se non frequenti Ca' Foscari non serve che rispondi a questa domanda)

Mark only one oval.

1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Hai seguito i corsi offerti dal CLA o altri corsi in preparazione all'esame B1?

Mark only one oval.

- SI'
- NO

5. Con quale punteggio hai passato l'esame B1 del CLA? (per gli studenti di Ca' Foscari)

6. Con quale punteggio ha passato l'esame B1 d'inglese?

7. Hai seguito i corsi offerti dal CLA o altri corsi in preparazione all'esame B2? (se non frequenti Ca' Foscari non serve che rispondi a questa domanda)

Mark only one oval.

- SI'
- NO

8. Con quale punteggio hai passato l'esame B2 del CLA? (per gli studenti di Ca' Foscari)

9. Con quale punteggio hai passato l'esame di inglese B2?

10. Hai usufruito di qualche misura o strumento compensativo?

Mark only one oval.

- Si'
 NO

11. Quante volte hai ripetuto l'esame di Inglese 1

Mark only one oval.

0	1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Quale punteggio hai ottenuto nell'esame di Inglese 1?

13. Quale sezione dell'esame di Inglese 1 è stata più difficile per te?

Mark only one oval.

- Reading
 Listening
 Writing
 Speaking
 Other: _____

14. Quale di questi fattori sono stati più difficili da affrontare durante l'esame di Inglese 1?

Mark only one oval.

- Ansia
 Mancanza di text-to-speech
 Lunghezza dell'esame
 Qualità dei materiali d'esame
 Mancanza di tempo

15. Quale punteggio hai ottenuto nell'esame di Inglese 2?

16. **Quale sezione dell'esame di Inglese 2 è stata più difficile per te?**

Mark only one oval.

- Reading
- Listening
- Writing
- Speaking
- Other: _____

17. **Quale di questi fattori sono stati più difficili da affrontare durante l'esame di Inglese 2?**

Mark only one oval.

- Ansia
- Mancanza di text-to-speech
- Lunghezza dell'esame
- Qualità dei materiali d'esame
- Mancanza di tempo
- Other: _____

18. **Quante volte hai ripetuto l'esame di Inglese 3?**

Mark only one oval.

- | | | | | | | | | | | |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

19. **Quale punteggio hai ottenuto nell'esame di Inglese 3?**

20. **Quale sezione dell'esame di Inglese 3 è stata più difficile per te?**

Mark only one oval.

- Reading
- Listening
- writing
- Speaking
- Other: _____

21. **Quale di questi fattori sono stati più difficili da affrontare durante l'esame di Inglese 3?**

Mark only one oval.

- Ansia
- Mancanza di text-to-speech
- Lunghezza dell'esame
- Qualità dei materiali d'esame
- Mancanza di tempo
- Other: _____

Da uno a sette quanto ritieni difficili le seguenti discipline negli esami di lingua inglese?

1 = poco difficili 7 = molto difficili

22. Listening

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Reading

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Writing

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Speaking

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. Vocabulary

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. Grammar

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ambiente Universitario

28. Ci sono misure o strumenti compensativi messi a disposizione dall'università di cui non hai usufruito? Se sì, perché? *

29. **Le misure e gli strumenti compensativi garantiti dall'università sono stati rispettati?**

Mark only one oval.

- SÌ
 NO

30. **Hai potuto usufruire di strumenti compensativi durante gli esami di lingua? Se sì, quali?**

31. **Le misure di cui hai usufruito sono state effettivamente utili al superamento dell'esame?**

32. **All'interno della tua università esiste una figura specifica addetta al supporto degli studenti con DSA?**

Mark only one oval.

- SÌ
 No
 Non lo so

Esperienza Personale

33. **A quale età ti è stata diagnosticata la dislessia? ***

34. **Quali provvedimenti compensativi sono stati presi durante il corso dei tuoi studi nel campo delle lingue straniere?**

Mark only one oval.

- Sono stato affiancato da un'insegnante di sostegno
 Ho frequentato corsi privati
 Ho preso ripetizioni di lingua inglese
 Ho vissuto in paesi di madrelingua inglese per più di un mese
 Ho frequentato vacanze studio di meno di un mese
 Other: _____

35. **Quali dei provvedimenti presi credi ti siano stati più utili?**

Da uno a sette quanto trovi difficili le seguenti discipline inglesi nella vita di tutti i giorni?

1= molto facili 7= molto difficili

36. Reading *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

37. Listening *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

38. Writing *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

39. Speaking *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

40. Ti trovi in difficoltà a utilizzare il dizionario in inglese? *

Mark only one oval.

SI'

NO

Da uno a sette quanto sono difficili per te i seguenti ambiti nella scrittura in inglese?

1= Molto facile 7= Molto difficile

41. Spelling *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

42. Organizzare le idee sul foglio *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

43. Rendere le idee in modo lineare *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

44. Dividere le parole *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45. Dare informazioni *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

46. Altro..

Da uno a sette quanto sono difficili per te i seguenti ambiti nella lettura in inglese?

1= Molto facile 7= Molto difficile

47. Leggere le lettere in modo distinto *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

48. Dividere le parole *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

49. Ricordare ciò che si è letto *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

50. Leggere ad alta voce *

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

51. Altro..

APPENDIX B: DEAF STUDENTS' QUESTIONNAIRES

Lingua inglese all'università

Esami di lingua inglese

* Required

1. Sesso *

Mark only one oval.

- M
 F

2. Dove hai frequentato l'università?

3. Che facoltà hai frequentato in triennale?

4. Hai frequentato la laurea magistrale?

Mark only one oval.

- SI'
 NO

5. Quale corso di laurea hai seguito in magistrale?

6. Quali supporti avevi durante i corsi?

Mark only one oval.

- Interprete LIS
 Tutor presente in classe
 Tutor per gli appunti delle lezioni
 Supporti visivi
 Altro

7. Quale dei supporti di cui hai usufruito è stato più utile?

8. Hai frequentato corsi di lingua inglese?

Mark only one oval.

- SI'
 NO

9. Se hai frequentato corsi di lingua inglese, quali supporti avevi durante le lezioni?

Mark only one oval.

- Interprete inglese-LIS
- Tutor in classe
- Tutor per gli appunti
- Supporti visivi
- altro

10. Quale dei supporti ti sono stati più utili per imparare l'inglese?

Quanto hai migliorato le tue abilità in lingua inglese durante le lezioni universitarie?

11. Conoscenza della grammatica

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Speaking

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Vocabolario

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Lettura del labiale in lingua inglese

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Writing

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Reading

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Quale punteggio hai ottenuto nell'esame di lingua inglese? (se più di uno inserire tutti i punteggi)

18. Hai dovuto ripetere gli esami di lingua inglese più di una volta? se sì quante?

19. Cosa non ti è piaciuto del corso di lingua inglese a livello di apprendimento della lingua?

20. Cosa non ti è piaciuto del corso di inglese a livello personale?

21. Cosa cambieresti in futuro sullo svolgimento delle lezioni di lingua inglese?

22. Quali modifiche hai avuto sugli esami di lingua inglese?

Storia personale

23. A che età hai perso l'udito?

24. Hai genitori udenti?

Mark only one oval.

- SÌ
 NO

25. **A che età hai imparato la lingua dei segni italiana?**

26. **Conosci altre lingue dei segni?**

Mark only one oval.

- SI'
 NO

27. **Se si quali?**

28. **Nel tuo percorso di apprendimento hai utilizzato più spesso la lingua dei segni o la lettura del labiale?**

Mark only one oval.

- LIS
 Lettura del labiale
 Entrambe
 Altro

29. **Quanto è sviluppato il tuo italiano orale? 1=molto poco 7= molto**

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. **Quale voto daresti la tua abilità di lettura del labiale in italiano da 1 a 7? 1=scarsa 7=molto buona**

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. **Quando hai avuto il primo approccio con la lingua inglese?**

32. **A quale livello di lingua inglese sei arrivato alla fine del tuo percorso universitario?**

Mark only one oval.

- A1
 A2
 B1
 B2
 C1
 C2

Da 1 a 7 dai un voto alle tue abilità di lingua inglese

1= non buone 7 =molto buone

33. Vocabolario

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

34. Grammatica

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

35. Writing

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

36. Lettura del labiale inglese

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

37. Speaking

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

38. Reading

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Da 1 a 7 quanto ritieni difficili le diverse abilità in lingua inglese?

1= molto facile 7=molto difficile

39. Vocabolario

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

40. Grammatica

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

41. Writing

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

42. Lettura del labiale inglese

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

43. Speaking

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

44. Reading

Mark only one oval.

1	2	3	4	5	6	7
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX C: INFORMED CONTENT

DICHIARAZIONE DI CONSENSO INFORMATO

Questo studio tratta dell'apprendimento delle lingue a livello universitario da parte di studenti con DSA. La sua firma su questo modulo indicherà la volontà di partecipare allo studio. La ricerca sarà condotta da Chiara Mazza sotto la supervisione della professoressa Giulia Bencini.

Lo studio consterà di un questionario volto a identificare le difficoltà degli studenti universitari con DSA durante gli esami e le lezioni di lingua inglese e di uno studio sulle prove stesse. La finalità della ricerca è di creare alcune linee guida per la creazione e la redazione delle prove d'esame di inglese, in modo che non siano di ostacolo agli studenti con disturbi specifici dell'apprendimento.

La sua firma su questo modulo significherà la sua volontà di partecipare allo studio, in qualsiasi momento può però decidere di uscire dalla ricerca.

Questo progetto è una ricerca di base, tutti i dati verranno elaborati dalla ricercatrice e i risultati verranno pubblicati come tesi di magistrale. Il suo nome non apparirà in nessuna forma e la sua identità non sarà riconoscibile.

La partecipazione allo studio è volontaria.

Il/la sottoscritto/a _____ nato/a a
_____ il _____

dichiara di avere letto e di acconsentire alle condizioni riportate nel modulo e dichiara inoltre:

- di essere maggiorenne;**
- di aver letto con attenzione tutti i punti della dichiarazione;**
- di dare il proprio consenso a partecipare alla ricerca.**

Data _____

Firma _____