Equal opportunities for access to university education: Language testing for students with disabilities

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1. Introduction

This paper presents a project funded by the Italian Ministery of Education, University and Research (MIUR) in 2013-2015 to develop accessible language tests.

Italian legislation establishes national guidelines that set out accommodations and exemptions for students who are medically certified to guarantee their access to education (Laws 104/1992, 17/1999, 170/2010). As a result, increasing numbers of disabled students are continuing their studies at university level. Although the increasing numbers of disabled students enrolling in tertiary level education can only be seen in a positive light, universities are still insufficiently prepared for dealing with the many issues that this trend raises.

For enrollment, Italian universities require mandatory certification of general English skills at the CEFR B1 level. Students must often also demonstrate their skills in written Italian as a mandatory entry requirement. The main focus of the project presented here was to provide students with sensory, language and learning disabilities with equal opportunities in the language testing required for university entrance, while maintaining those features essential to ethical testing, test validity, and fairness.

In previous literature, issues related to testing the language competences of disabled students have been little investigated (e.g. Fulcher 1999; Bejar 2010; Hansen et al. 2004; Koretz et al. 2002).

Little attention has been given so far to the fact that the difficulties faced by deaf students concern not only the oral dimension of language

acquisition, but also the written dimension. Deaf individuals are characterized by an atypical language acquisition of the national language (they can only have a typical acquisition of a sign language thanks to their intact visual system). Nevertheless, despite difficulties in specific aspects of language (spelling, functional morpho-syntactic elements, field-specific lexis, e.g. Caselli et al. 1994, Chesi 2006, Bertone et al. 2011, Trovato 2014), the language level reached can be sufficient for university study. It is therefore important to guarantee equal opportunities to deaf students who possess adequate cognitive abilities beyond the difficulties encountered in language.

Little attention has also been given to the consequences of dyslexia on morpho-syntactic and textual dimensions of language[1] and on meta-linguistic knowledge, which are required in advanced study. Without sufficient theoretical awareness, the accommodations and exemptions used in testing at the university level risk becoming ineffective. In many cases, the accommodations suggested by the Law (e.g. additional test time, vocal synthesizers, and digital dictionaries) have failed to produce the results desired.

2. Current language tests

An analysis of the language tests currently used at Italian Universities has revealed different approaches to assess language competence in English and Italian tests. English tests aim at checking actual language competence at different CEFR levels. They are however often limited to reading and writing skills, while students with dyslexia might have

[1] This is acknowledged in two lines of the *Linee guida per il diritto allo studio degli studenti con disturbi specifici di apprendimento*, issued by MIUR on July 12, 2011**:** "La comorbilità può essere presente anche tra i DSA e altri disturbi di sviluppo (disturbi di linguaggio, […])". Individuals with dyslexia may indeed display phonological deficits (Ramus et al. 2003) and difficulties in the repetition of non-words (Brady et al. 1983, Elbro 1997, Guasti 2013); poor lexicon (Snowling et al. 2003) and difficulties in naming tasks (Manis et al. 2000); syntactic deficits in the comprehension and production of relative and passive clauses (Mann et al. 1984, Stein et al. 1984, Barshalom et al. 1993, Wisehart et al. 2009, Robertson & Joanisse 2010, Cardinaletti 2014, Cardinaletti & Volpato 2015, Pivi & Del Puppo 2015); clitic pronouns (Guasti 2013, Zachou et al. 2013), negation (Vender & Delfitto 2010), and verb morphology (Rispens et al. 2004).

attained a higher competence in the oral than in the written language. Italian tests instead often simply aim at verifying the knowledge of spelling rules, the knowledge of irregular words, and meta-linguistic knowledge. Some examples from one of the Italian tests used at the Ca' Foscari University of Venice are provided in (1):

(1) a. normative issues: *Quali tra le seguenti divisioni in sillabe sono giuste? co-spet-to | ris-pet-to | sa-lva-gen-te | sal-va-da-na-io*
b. spelling issues: *La parola "nondimeno" si può scrivere anche disgiunta, "non di meno"*?
c. meta-linguistic issues: "*Migliore*" *è il comparativo di "buono"*.

These aspects are particularly demanding for deaf students and students with dyslexia and tell us little about their real language and communicative competence. It is thus necessary to avoid tasks and items that are uselessly difficult for deaf students and students with dyslexia. It is instead necessary to check whether their language competence in Italian is sufficient to attend University. Language tests should in particular evaluate the comprehension of complex language structures, which are typical of the formal register used at University, in both written and oral tasks (namely, subordinate clauses, relative clauses, passives, long-distance pronominal dependencies, etc.). Note that many constructions of the formal register are acquired late and thanks to language experience of this variety via reading (for relative clauses in Italian, see Guasti and Cardinaletti 2003).

The project has designed a series of studies to examine different aspects of computer-based tests in the native (Italian) and the foreign language (English). The data have been collected at the Universities of Bologna, IULM Milano, and Venice, and analysed by researchers in Bologna and Venice (cf. Cardinaletti, to appear, for the presentation of the project).

3. Design, participants, and results of the Italian test

The Italian test was constructed in a way similar to currently used English tests, in order to verify the actual language competence attained. It contained (i) three reading comprehension tasks, featuring texts of different length and complexity and different answer typologies: true/false and

multiple choice with four options, (ii) a grammar task testing syntactic, morphological, and lexical knowledge, (iii) a cloze test, (iv) a c-test, and (v) a listening task (which was not administered to deaf students).

11 deaf students, 33 students with dyslexia, and 60 controls participated in the experiment.

Results show difficulties with many grammatical aspects (e.g. negation and clitic pronouns) in both the reading tasks and the task which explicitly tested grammatical competence. In the text comprehension task, particularly demanding were questions which required inferences to be answered and/or contained words which were not present in the text provided by the examiner (e.g. synonyms). The c-test has proved to be particularly demanding for students with dyslexia and more demanding for them than for deaf students. Finally, in the listening task, slightly different answers by students with dyslexia and the control group were given, which suggests some difficulties in oral comprehension by students with dyslexia.

4. Design, participants, and results of the English test

The English test was designed at the CEFR B1 level and included (i) three reading comprehension tasks, containing texts of different length and complexity and different answer typologies: true/false and multiple choice with three and four options, (ii) a grammar task with different design, namely isolated and contextualized sentences, and different answer typologies: multiple choice with three and five options, and (iii) a listening task with different answer typologies: true/false and multiple choice with three and four options (which was not administered to deaf students).

All students participated in the experiment. The data have only been analysed for those students who already had a B1 certificate (6 deaf students, 8 students with dyslexia, and 24 controls).

In the reading comprehension task, the true/false typology of answers has proved to be most critical for students with dyslexia, in particular those items which require the "false" answer. Three and four option items have proved to be equally difficult. In both the reading and listening comprehension tasks, items which required inferences have shown to be highly demanding for students with dyslexia. In the multiple choice fill-in

grammar test, sentences embedded in a linguistic context have shown to be easier to be completed than isolated sentences. Five option items have proved to be more difficult than three option items.

5. Observations for accessible testing and conclusions

Results allow us to develop guidelines for accessible Italian and English tests. Multiple choice items with three options and with sentences embedded in a context have proved to be the ideal format for deaf students and students with dyslexia. Oral comprehension tasks and assessment of textual competence have proven to be particularly telling and should be included in both the English and the Italian tests.

A c-test implies a high cognitive effort and requires strong concentration and cognitive flexibility skills. A c-test should not be included in a language test since it appears to be not accessible to students with dyslexia.

Note also that students with dyslexia did not entirely use the (20%) extra time they had at their disposal. This suggests that too much extra time might make the test too long and uselessly fatiguing for them.

We have also observed that students with dyslexia preferred not to provide any answer more often than deaf students and control students. They also faced the greatest difficulties in providing a self-evaluation of their language competence and post-task judgments of task difficulty. These results also suggest that self-evaluation and post-task judgments are highly telling and could be included in language tests to get information about the students' attitudes, which can affect their university career.

These results also represent very useful information to project tailored courses in preparation for the University entrance tests in Italian and English, as well as other language exams in all degree courses.

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