Assessing L2 Students with Learning and Other Disabilities

Edited by

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CHAPTER NINE

FAIRNESS AND VALIDITY IN TESTING STUDENTS WITH SPLDS: A CASE STUDY FROM ITALY

CLAUDIA D'ESTE AND GERALDINE LUDBROOK

severe SpLDs by pointing to all the difficulties involved. In the light of this illustrate the different phases of the test administration to a student with and adopted to allow dyslexic students enrolling at Venice University focus on a case study to describe the measures that have been developed certification of general English proficiency on enrolment. The growing numbers of dyslexic students applying for university entrance therefore how they have been addressed. experience, we discuss the issues of fairness and validity that emerge, and access to the CEFR level BI English entrance test. In particular, we the framework of the national guidelines imposed by the Italian law. We raise the question of providing fair and valid tests of English language, in and university level. Italian universities now require mandatory numbers of dyslexic students continue their studies at secondary school assessment for students with documented SpLDs. As a result, increasing the Italian Ministry of Education guarantee access to learning and context of the Italian university system. National guidelines established by university students with Specific Learning Difficulties (SpLDs) in the when considering the assessment of the English language proficiency of This article sets out to examine some of the issues of validity that arise

1. Introduction

A policy of integration for disabled students has been applied to mainstream education since the 1970s. However, only recently has Italy established national guidelines for learning and assessment for students who present official documentation of *Specific Learning Disabilities* (SpLDs) to guarantee their access to all levels of education. The guidelines

are mostly intended for students in secondary education. University education is not considered a separate context, although learning and assessment procedures differ greatly from the school setting.

Italian universities now require mandatory certification of general English proficiency at the CEFR B1 level on enrolment. Students who do not possess certification from an internationally-recognised examinations board are required to sit in-house tests developed by each individual university. Venice University has developed a computer-based B1 English test to be administered to first-year students to meet this requirement. The multiple-choice test assesses reading and listening skills, and knowledge of grammar and lexis.

This article sets out to examine some of the issues of validity that arise when considering the assessment of the English language proficiency of university students with dyslexia and related SpLDs. We begin with a review of the legislative background in Italy to identify the provisions made for students with SpLDs. We then give a brief definition of these SpLDs and the implications they have for Italian students learning English as a second or foreign language. We continue with an outline of concepts of validity in language testing, and a discussion of how a judicious application of the Italian guidelines is needed to reduce the threat to test validity and fairness.

In the second part of the paper, we focus on the case study of a student with severe multiple SpLDs, and the manner in which access to the B1 English test was arranged. We present his test results and the difficulties encountered in making principled decisions regarding their use so as to open up discussion on their validity as a consequence of the compensatory measures applied. We conclude with a reflection on the difficulties of establishing standardized accommodations for test takers with severe multiple SpLDs. We also refer to the need for considering individual cases when deciding on accommodations so as to guarantee both fair access and valid testing.

2. Disabilities legislation in the Italian education system

Italy was one of the first OECD countries to apply a policy of integration of disabled students in education. Currently about 99% of disabled students are enrolled in mainstream education. The remaining 1%—mainly students with severe visual, hearing or cognitive difficulties—is educated in separate institutions. Estimates from 2011 data suggest that students with disabilities represent about 2.3% of the school population (Associazione Trelle *et al.* 2011).

A variety of forms of assistance to learning are available to disabled school students under Italian law. They range from the presence of support teachers in the classroom to adaptive technologies to enable learners with disabilities to be educated in mainstream classrooms to the greatest extent possible. Such technologies are speech-to-text conversion or voice recognition, magnification devices, Braillers, and visual and graphic organisers.

Specific legislation also governs the assessment of students with disabilities. In the school system, each student has an individual educational plan that takes into account their learning potential and their starting level. Assessment is then calibrated to each student's individual potential. Access to the final state exam is assisted by additional time, adaptive technologies and the presence of support teachers. However, students may also sit "equivalent" exams, designed by a commission of teachers within each individual school (Associazione Trelle et al. 2011).

Access to university education was granted in 1992¹ Further legislation regarding services for disabled students intending to continue their studies at the tertiary level was introduced in 1999.² The services include assistance from personal tutors and the provision of adaptive technologies to facilitate learning and assessment. Most universities now have specific offices with trained staff to assist students with disabilities in their university studies and provide co-ordination with teachers regarding access to examinations.

The legislation cited above has been integrated in recent years by regional laws, regulations, and administrative decisions. Nevertheless, it remains a rather generic background of guidelines. Especially the guidelines regarding university examinations, despite the assistance of disability offices, are often dealt with on the basis of individual cases with no or little co-ordination between teachers of different disciplines.

2.1 Legislation on SpLDs

Specific legislation on SpLDs has been drafted only in the last decade. Even though students with SpLDs represent around 4–5% of the Italian school population, in the early 2000s legislation was limited to local regulations, regional laws and ministerial letters. Recognition of students with SpLDs, adoption of learning and teaching strategies to meet their needs, and use of compensative instruments and technologies were applied

See law n. 104/1992.

² See law n. 17/1999.

depending on local legislation with differences between regional educational contexts. Best practices were, thus, not shared on a national level, but limited to a small number of teachers and education professionals.

Specific learning difficulties were fully recognised by Law 170/2010. The key words of this law are early diagnosis and certification, teaching and learning flexibility, and the introduction of compensatory measures or exemptions. The law defines dyslexia, dysgraphia, dysorthographia, and dyscalculia as specific learning difficulties, and sanctions the right to education for students with these learning difficulties. It first delineates the need for an official diagnosis and certification of cases of SpLDs. Once official diagnosis has been obtained and documentation presented to the school, students may obtain an individual educational plan (PEI, or *Piano Educativo Individualizzato*).

Individual educational plans are a combination of what is called individual learning (didattica individualizzata) and personalised learning (didattica personalizzata). Individual learning refers to the student's individual activities and method of study to develop and improve weaker skills and competences. Personalised learning involves the use of different teaching methodologies and strategies, in order to meet the student's needs and promote his/his potential. However, individual educational plans refer only to the school context, and the law makes no similar provisions for university education.

Conversely, the compensatory measures or exemptions established by law can be applied at all levels of education, in the classroom but also during examinations. University courses are for the first time included in the analysis and investigation of students with SpLDs. The indications provided by the law must also be applied to entrance tests and curricular examinations at university level.

Further guidelines implement the law by focusing on new educational and assessment methodologies and on the training of support teachers. They basically stipulate two kinds of provisions: compensatory measures and exemptions.

The decree and guidelines also contemplate the use of educational and technological compensatory instruments to facilitate study, such as:

- tables or mind maps,
- voice synthesizers to convert language text into speech,
- recorders instead of note-taking,
- PC word processors with spelling and grammar checks,
- calculators.

Exemptions refer to:

exoneration from activities students with SpLDs find particularly hard to perform such as written tasks, which can be replaced by oral activities.

- up to 30% extra time allotment during tests,

reduction of the curricular programme to be studied

Only in the case of serious SpLD diagnosis can students be exempted from written examinations and given an oral interview instead.

The 2011 guidelines refer specifically to university students with SpLDs, and confirm their right to the same compensatory measures and exemptions provided for primary and secondary schools. In addition, they also introduce a networking of tutoring services in order to mediate with teachers and monitor the application of the law.

2.2 Legislation on foreign language learning and testing

In addition to the national guidelines for learning and assessment for students with dyslexia and SpLDs, further legislation has provided additional guidelines with specific reference to the teaching and testing of foreign languages.³

Recommendations are provided as to the criteria for use in assessment. In relation to receptive skills (reading and listening), the legislation suggests that teachers and testers should focus on general understanding rather than on accuracy and detailed comprehension. As far as productive skills are concerned, teachers are invited to apply the same principles and evaluate communicative effectiveness. Task achievement is of the utmost importance. However, it is suggested that, when assessing students with dyslexia and SpLDs, grammar range and accuracy together with the use of a wide range of lexical resources are not to be considered as essential features.

In addition to guidelines for assessment criteria, the legislation provides for the use of technological compensatory instruments in testing settings. These include voice synthesizers to assist reading skills, and PC word processors with spelling and grammar checks and online dictionaries to assist writing skills. What instruments are used in examinations is at the discretion of the examining commission.

Exemptions are represented by a reduction in the curricular programme and, in the case of certified severe SpLDs, students might be exonerated from written assessment and be provided with equivalent oral assessment. Exemption from all forms of written assessment of a foreign language was

³ DM 12/07/2011 (Legge Gelmini).

initially permitted, but this measure was modified in later legislation. It is now recommended that dyslexic students be given additional time for written exams in foreign language state exams rather than exemption to ensure the legal validity of the final diploma.

The critical aspect of the legislation is the discretional choice of compensatory measures and exemptions. In the secondary school context, teachers may observe the performance of students over a period of time following the guidelines for their individual learning plans, and make informed decisions about their application. However, at university level, students work in relative isolation, and co-ordination between individual teachers and the disabilities offices is at best tenuous. This makes decisions regarding what measures to apply problematic. We will return to this issue in the next sections.

3. Dyslexia and related SpLDs

The national guidelines for learning and assessment for students who are certified with SpLDs refer explicitly to the definition and recognition of dyslexia, dysgraphia, dysorthographia, and dyscalculia. It is beyond the scope of this article to propose a detailed definition of dyslexia and related learning difficulties. However, the literature points to four main features of dyslexia. It will be useful to review them here to better understand the difficulties dyslexics face in processing language.

Firstly, dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent wording, reading and spelling. Dyslexics have difficulty in mapping phonemes to graphemes, which can lead to slow or inaccurate word-recognition (Kormos and Smith 2012).

Secondly, characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. It appears that dyslexics have difficulties in retaining spoken information within their short-term memory systems, in accessing spoken information from long-term memory, and in reflecting on the units of sound within words (Kormos and Smith 2012, 30–31).

Thirdly, dyslexia is neurobiological in origin and occurs across the range of intellectual abilities; in other words, it is not related to measured IQ. In typical readers, cognition and reading/spelling develop together while in dyslexic readers they appear to develop differently (Gabrieli 2000)

Fourthly, dyslexia is usually conceived as on a continuum ranging from mild to severe difficulties. It is not therefore a distinct category, with clear cut-off points, but is often a series of related linguistic difficulties,

such as dysgraphia, dysorthographia and dysnomia (Payne and Turner 1999). In addition, there are some common cognitive problems connected with dyslexia. These are dyscalculia, dyspraxia, short-term memory deficit, and *Attention Deficit Disorder* (ADD), often associated with hyperactivity (ADHD).

Dyslexics thus may have difficulties in retaining information in the working memory, which hinders reading and listening to longer oral or written texts. At the same time a limited attention span adds fatigue to learning and requires repeated input of new knowledge. Difficulties with attention also lead to problems in managing time and personal organization (Kormos and Smith 2012, 32–33).

Not only do these problems occur comorbidly, they also manifest themselves in varying degrees of severity. It is therefore problematic making inferences from one individual to another as no individuals have the same linguistic and cognitive profile. See Ferrer *et al.* (2010) and Lyon *et al.* (2003) for further information on defining dyslexia and related SnLDs

The frequency of dyslexia also varies between languages. In fact, dyslexia is common in languages with deep orthography: writing systems with relatively irregular correspondence between sounds and letters. Dyslexia is less common in languages with more transparent orthographies: writing systems with more consistent mappings between sounds and letters (Lindgren 2012, 19). In their study of English- and Italian-speaking dyslexics, Job *et al.* (2006) came to the conclusion that it is the orthographic irregularity of a language that may alter the degree of success in learning to read. It can also affect the actual manifestation of dyslexic symptoms.

From this brief overview of potential language problems for dyslexics, it is clear that, in general, the process of second language acquisition brings with it an additional load for learners with dyslexia and related SpLDs. Such learners have considerable difficulty in reading and using a second language (see Sparks and Ganschow 1991; Sparks *et al.* 2008).

In addition to this generalised difficulty in acquiring a second language, the learning of English for Italian dyslexic students is additionally problematic if we take into consideration the contrast in orthographies between the two languages. English has a highly inconsistent match between the 26 graphemes and the 44 phonemes of its writing and sound systems. Indeed the British Dyslexia Association estimates that 10% of the British population are dyslexic, 4% severely so.⁴

⁴ http://www.bdadyslexia.org.uk/about-us.html.

Fairness and Validity in Testing Students with SpLDs

This compares with the much lower numbers in countries with more transparent orthographies such as 4 to 5% in Italy, which has a shallow orthography and a close matching between letters and sounds (Lindgren et al. 1985; Lindgren 2012; Associazione Trelle et al. 2011). Additional problems therefore arise for Italian learners of English as a second language.

We now turn to the issues of validity and fairness in language testing. We examine how the guidelines for the treatment of dyslexic students set out in Italian law represent a possible threat to the validity and, more generally, the fairness of high-stakes English language tests.

4. Issues of validity and fairness in language testing

The issue of validity in language testing concerns principally the use and interpretation of test results. Messick (1989, 13) defines test validity as "an integrated evaluative judgement of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores". The validity of a test therefore lies in the degree to which inferences about the test taker's language performance can be justified. How a test taker performs on a high-stakes test of English for university entrance in English-medium programmes, for example, is a prediction of how they will be able to perform in an English-medium educational context.

Messick (1989, 34–35) identifies two major threats to validity in language tests. The first is construct-irrelevant variance. This occurs when a test measures variables that are unrelated to the construct, i.e. what the test claims to measure. This may result in construct-irrelevant easiness, when the test tasks may provide clues that allow some test takers to respond correctly in ways that are irrelevant to the test construct, and result in higher scores. This may also result in construct-irrelevant difficulty, when the test is more difficult for some test takers, for irrelevant reasons, and results in lower scores.

Construct-irrelevant variance is often perceived as a threat to the validity of score interpretations for students with SpLDs. This is because such students often have difficulties which can affect their performance on educational tests. For example, a student may be unable write test answers with decipherable handwriting, making it difficult for the rater to read the written product. The effects of the SpLD are construct-irrelevant if the skills (handwriting, in this case) are irrelevant to the construct being assessed.

Messick's second threat to validity is construct under-representation.

This occurs when the tasks measured in the assessment fail to include important dimensions or facets of the construct. As a result, the test scores do not reveal the test taker's true abilities within the construct, as this is defined for the purpose of the test (Messick 1989, 35). If, for example, students with SpLDs are exonerated from a part of a test, the test scores no longer fully interpret the student's abilities.

Closely related to Messick's concepts of construct-irrelevant variance and construct under-representation, and of particular importance when assessing the performance of students with SpLDs, is the notion of cognitive validity. According to O'Sullivan and Weir (2011), one of the most important assumptions made when designing test items and tasks is that responding to them relies on a correct activation of certain underlying cognitive processes. The circumstances of a real-world communicative event cannot be reproduced in the artificial environment of a test. However, cognitive validity requires discovering whether the mental processes that a test elicits from a candidate resemble the processes that they would employ in non-test conditions (Glaser 1991).

Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. These traits suggest that the cognitive processes used by dyslexic test takers may be different from those used by students without SpLDs. Field (2006) proposes three questions that may be explored to investigate cognitive validity in language testing for students with SpLDs:

- To what extent are the cognitive processes elicited by a test comparable to those that would be employed in a real-world setting?
- 2. Is the range of processes elicited by a test comprehensive enough to be representative of behaviour in a real-world setting?
- 3. Are the cognitive demands imposed by a test sufficiently finely calibrated to reflect the level of the test?

Research on L2 learning of students with SpDLs is limited, and fails to provide an adequate basis for definitive conclusions about the mental processes elicited by language tests. Cognitive validity therefore remains an almost unexplored feature of the overall test validity. In addition, learning difficulties are not homogeneous, and similar disabilities may affect different people in different ways. Therefore, it is extremely difficult to identify a possible standard mental process. Nonetheless, investigation on cognitive validity may be decisive. The understanding of mental processes in the language learning of students with SpDLs is potentially the basis for the identification of the test construct on which to design and build a valid test.

Another essential aspect of test validity is fairness, and "anything that weakens fairness compromises the validity of a test" (Xi 2010, 147). There are three generally-accepted descriptions of test fairness: lack of bias, equitable treatment of all test takers in the testing process, and equity in access to learning the materials covered in a test. See Kunan (2000) for a more detailed discussion of fairness in language testing.

Fairness with regard to test takers with disabilities is generally understood as providing access to a test applying appropriate accommodations. Accommodations are pre-approved alterations to the standard administration conditions designed to ensure accessibility to a test for test takers with disabilities. They do not alter the construct of the test being measured or substitute for knowledge or abilities that the student has not attained. Nor do they provide an unfair advantage for students with disabilities over students taking tests under standard conditions. Frequent forms of testing accommodations are flexibility in scheduling/timing; than ges in the method of presentation; and changes in the method of response (see Stretch and Osborne 2005).

Modifications, on the other hand, are changes made to the testing process or the content of the assessment itself, or provision of certain adaptive technologies or services, which affect the constructs being tested. Examples of testing modifications that affect the construct of the test are simplification or explanation of test questions; reading of items designed to test the student's reading skills; use of spell and/or grammar-check devices on a test of the student's writing skills; and use of a calculator on a test of the student's computational skills.

Test fairness requires ensuring that irrelevant factors do not give rise to differences in test performance across subgroups and disabilities, i.e. construct-irrelevant personal characteristics of test takers have no appreciable effect on test results or their interpretation (Xi 2010). Yet, all test takers must be treated equally in the testing process.

In the next section, we will discuss the guidelines, set out under Italian law, for students with medically diagnosed SpLDs in both learning and testing contexts in the light of the concepts of validity and fairness mentioned above.

5. Issues of validity and fairness in the Italian context

A close analysis of the compensatory measures set out in the Italian legislation suggests that their injudicious use might create a serious threat to the validity of tests, i.e. the validity of the score interpretations, if used

in the testing context. Indeed, most of the compensatory measures appear to be modifications—changing what is tested—rather than accommodations merely providing increased access to the test.

The assumption that students can be allowed to use the same adaptive technologies on tests that they are accustomed to using in the classroom, such as a voice synthesizer for a reading comprehension test, may alter the nature of the ability being tested. This would seem to be a case of one of Messick's two serious threats to validity in language tests—construct under-representation—in which important features of the construct are omitted from the test. If the test claims to measure the test taker's ability to read a written text in the foreign language, a voice synthesizer that converts text to speech may measure instead the test taker's ability to understand spoken text, thus excluding reading skills.

It is for this reason that international examination boards certifying English second/foreign language proficiency only permit measures that are clearly accommodations, such as extra time (usually 25% of the normal time) and supervised breaks to compensate for fatigue. Use of a computer is allowed, but without use of the spell check, grammar check or thesaurus functions. Measures that modify the nature of the ability being tested, such as voice recognition software or programmes that convert speech to text, and screen-reading software, such as voice synthesizers, are not permitted.⁵

Test accommodations are designed to promote fairness in testing and to lead to more accurate interpretation of students' test scores. However, if the accommodation leads to an unfair advantage for the students for whom they are applied then the scores from accommodated exams may be invalidly inflated. This would be unfair to students who do not receive them. The benefits provided to test takers with disabilities through the use of electronic dictionaries or the consultation of tables and mind maps would represent an unfair treatment to students taking tests under standard conditions.

A further challenge arises from the generic nature of the guidelines set out in Italian legislation and the consequent difficulties that teachers and testers have in making principled decisions regarding their use. This is particularly true in the case of foreign language—and especially English—learning and testing. Distinguishing between errors due to dyslexia or related SpLDs and errors due to lower levels of proficiency or to the normal language learning process is problematic.

Italian legislation leaves the choice of which measures to adopt for

⁵ See http://www.cambridgeesol.org/exams/special-circumstances/index.html.

students with SpLDs to the discretion of the teachers and examiners in charge of the test being administered. In the school context, where teachers have had extended contact with students and are aware of their abilities and special needs, this would seem to be a useful procedure. It allows a personalised assessment of the needs of each individual student. This is particularly important when test takers have multiple disabilities requiring a variety of accommodations that go beyond the standard requests for extended time and additional breaks.

However, in the Italian university context this is not an easy process to carry out when there has been no previous contact with the individual students. Test administrators are required to make decisions based on very little background information. Students must hold documentation of their SpLDs in order for compensatory measures to be applied. Often this documentation is a brief medical certificate noting the disability or disabilities (dyslexia, dyscalculia etc.), and the degree of severity (mild, severe). Even when more detailed information is provided, it is usually beyond the professional competences of the teachers and test administrators to be able to interpret such information in terms of appropriate compensatory measures.

We will now turn to the case study of a severely dyslexic student to describe how the considerations above were applied in practice. We will illustrate some of the difficulties test developers and administrators have to resolve when testing the English language proficiency of students with such SnLDs.

6. Marco: A case study

In the increasingly international world of education, certification of English proficiency has growing importance. It is used to gain access to university education or European exchange programmes for which English language at B1 or B2 level of the CEFR is required. The national requirement for evidence of CEFR B1 level of English proficiency for students enrolling at Italian universities has been met by Venice University. The university developed an in-house computer-based test for students who do not hold certification of this level from international certification boards. The test format is multiple-choice, and ninety minutes are given to complete the test. The test assesses the receptive skills of reading and listening, and knowledge of grammar and lexis at the B1 level.

The B1 test is a high-stakes test as first-year students cannot continue their studies unless they have passed it. Students are assumed to have

reached a B1 level of English proficiency on leaving secondary school, after studying the language for an average of 8 years. Nevertheless, about 35% of students do not pass the test at their first attempt.

Test administrators at the Venice University Language Centre apply a policy of inclusion. They attempt—as far as possible—to avoid exemptions or alternative forms of testing for students with disabilities, even though the law allows students to request these measures. Deaf students are exonerated from the listening test, otherwise a variety of compensatory measures are applied to enable students with disabilities fair access to the test. Visually-impaired students, for example, are allowed screen magnification or enlarged font and bigger line spacing, or readaloud accommodations in which a reader reads the test.

Following the 1999 legislation which guarantees access to universities for students with learning difficulties, most Italian universities have set up disability offices to help co-ordinate assistance for these students. Some of the services students may request by law are: supply of teaching material in electronic form, sharing of lecture notes from other students, and personalised examination conditions with extra time and the use of a computer with voice synthesizer. The law also makes provision for individual tutors to assist these students with their studies.

In 2010 the Venice University Language Centre was contacted by the disabilities office and asked to help with the case of *Marco*, who had recently enrolled at Venice University and needed to pass the B1 exam. Marco was diagnosed with multiple comorbid SpLDs. They included severe dyslexia combined with dysorthography and dyscalculia. In addition, he had short-term memory and attention deficit.

Marco had requested the services of a tutor to prepare for the English test. In addition he had initially asked to replace the computer-based test with an oral exam, which is a compensatory measure available to students with SnLDs.

The inclusion policy of the Language Centre aims to remove unfair disadvantages for disabled students. However, it also aims to prevent unfair advantages to the same students through the application of compensatory measures in an attempt to maintain the validity of the B1 English test as far as possible, while applying the measures set out under Italian law. The testing team, made up of language teachers and test administrators, technicians and a representative of the Disabilities Office, thus met with Marco to discuss his needs and to agree on suitable compensatory measures for the B1 English test.

During the meeting it was explained that the computer-based test had a multiple-choice format and was not a written exam. As a result, Marco

agreed to attempt the test instead of replacing it with an oral exam. Consequently, a first series of decisions were made concerning the way the test would be administered. Marco would sit the test in an individual session with 25% extra time and using a voice synthesizer. In addition, the test would be delivered in separate sections, i.e. listening and grammar, reading and lexis, on two separate days.

Marco sat the test twice, in January and May 2011, without reaching a satisfactory result in all four sections at the same time. His scores were not consistent between different skills. For example, in one session his listening reached a pass result, in the next it did not; his reading was below the pass score the first time, but improved the second time.

A second meeting was held to discuss further measures to be applied in the administration of the test. The 25% extra time and individual administration was confirmed. In addition, a better quality voice synthesizer was made available. Individual language tutoring was arranged with an experienced English mother-tongue tutor, and it was decided to focus on the individual sections of the test separately. Marco would sit each section at four-week intervals to allow him time to prepare for each section. Marco asked to use an electronic dictionary and to consult grammar tables during the test.

Marco sat the test in three separate sessions between January and May 2012, choosing to take the reading and listening sections separately, but to attempt the lexis and grammar sections on the same day. It was observed that, even though it was available, Marco did not use the dictionary during the test, but briefly consulted grammar tables. Marco's results on the test with the new revised delivery were surprising as, despite the individual tutoring, he performed worse on all of the sections of the test than in previous attempts.

The testing team now felt that all possible efforts had been made to meet the legal requirements for testing students with SpLDs and to guarantee fairness in Marco's test administration. At this point, and in the light of his most recent results, it was decided to interpret his scores. This was not an easy task as his scores on the separate sections had remained inconsistent between different skills.

The language teacher who had tutored Marco was interviewed in an attempt to understand the level he had reached in the classroom setting. Besides providing useful insights into Marco's learning difficulties and the strategies used to overcome them, the tutor assured us that Marco had shown improvement over the three-month period, and emphasised his high motivation. She was of the opinion that Marco had reached his highest possible level of English proficiency at this stage. The tutor identified

Marco's short-term memory as being the greatest obstacle in his learning as it affected his ability to retain grammar rules and lexical resources.

The final decision was made to use Marco's best scores in each section of the test, whenever it had been taken. In addition, even though his results on the grammar section had always been below the cut score, it was decided to accept this result. The rationale behind the decision was that the grammar section is the longest part of the test, possibly leading to anxiety and fatigue due to Marco's difficulties with attention deficit. Grammar is also one of the most difficult language features for dyslexic students in their L1 and is generally transferred to their L2; this was confirmed by Marco's tutor (see Brinckerhoff and Banerjee 2007, for further discussion of decisions regarding accommodations in high-stakes tests).

The report of this small case study has served to highlight some of the difficulties encountered by test administrators when dealing with students with SpLDs to ensure both fair access to the test and the validity of the test itself. The complexity of this student's SpLDs made identifying his needs particularly problematic. However, an interview with the student and agreement on the compensatory measures to be applied, together with the information provided by his language tutor, ensured that the validity of the test was maintained to the highest degree possible. We will develop the discussion of these issues in the final section below.

7. Discussion and future research

The case study described above provided an interesting exploration of the issues of validity and fairness when testing the English language proficiency of students with SpLDs within the framework of Italian law on access to university education.

Building a validity argument for the score interpretation of a test is a complex and ongoing process. Evidence of test validity derives from different sources of information and is never judged in absolute terms, but, generally, in degrees (Messick 1989). In their discussion on test validity, Alderson *et al.* (1995, 171) make an important distinction between "internal" validity, which involves the perceived content of the test and its perceived effect, and "external" validity, which involves comparing test scores with external measures. In this small case study, our considerations of the validity of the B1 test delivered with the chosen compensatory measures focused on the aspects of internal validity: face validity, content validity, and construct validity.

Face validity, or the degree to which non-experts judge that the test results are valid, appeared to be maintained as interviews with non-testing

experts, such as Marco's language tutor, representatives from the disability office, and Marco himself, revealed.

Content validity, or the degree to which the test covers the content domain, also appeared to be maintained. The test content was not modified or reduced in any way, altering neither the B1 syllabus of reference nor the test specifications.

Construct validity, or the degree to which a test successfully measures what it sets out to test, avoiding Messick's threats of construct-irrelevant variance and construct under-representation (see Section 4 above), is harder to establish.

The English test discussed here serves to ascertain that students enrolling at Venice University have the minimum language proficiency required for undergraduate study. The test results therefore theoretically reflect the test takers' possession of a CEFR B1 level of English proficiency. The validity of the construct when testing the language proficiency of students with SpLDS remains an open question. On the one hand, the construct of the test administered to Marco appears to be unvaried: Marco sat the same test as other students with no exemptions, thus maintaining face and content validity, and apparently avoiding construct under-representation. On the other hand, the use of certain compensatory measures permitted under Italian law may lead to precisely this threat. The use of a voice synthesizer on the reading test, in particular, would seem to modify the language skills actually being assessed.

The issue of fairness as a feature of test validity has also been examined. The arrangement of individual language tutoring and the organization of the test delivery into separate sections were decided on to give Marco the opportunity to focus on the individual sections of the test. He was also allowed 25% extra time to complete the test. However, these measures would certainly have provided additional advantages for test takers without disabilities. It is agreed that equitable treatment is necessary in test administration. The question remains as to whether these measures represented equitable treatment, or whether they gave Marco an unfair advantage.

There are no definitive solutions to the issues raised in this discussion. However, it is apparent that some degree of balance is required between the needs of test takers with SpLDs and the responsibility of teachers and test administrators to guarantee equal access to learning and assessment. Considerations of the principles of fairness and validity, and the awareness that legislation is intended to guarantee equal opportunities to all, not equal outcomes for all, are important. They influence greatly the decisions as to what measures can be applied in the testing context. Flexibility and

sensitivity in applying guidelines on a case-by-case basis and the principled application of legislation are necessary to meet the needs of all the stakeholders involved in the testing process: test takers, test administrators and educational institutions.

7.1 Directions for future research

The case study discussed here provides useful indications for future research projects related to the investigation of the special needs of students with SpLDs in foreign language testing. The student observed had severe multiple comorbid SpLDs, which aggravated the issues to be dealt with. Nevertheless, two main areas for future investigation emerged from this study.

The first area is to explore the issue of reading skills and the use of a voice synthesizer in testing contexts. The use of voice synthesis has been shown to enhance reading rate and comprehension and to sustain longer reading for students with SpLDs (see, for example, Elkind *et al.* 1996). Nevertheless, the use of voice synthesizers in international examinations of English as a second/other language is generally not allowed as it is perceived as modifying the construct of the test, substituting reading skills with listening skills. There appears to have been little investigation of whether students with SpLDs using synthesizers to enhance reading are merely listening to the voice generated or whether some reading skills are also involved. Verbal reports and semi-structured interviews may capture test takers' perceptions of how they use reading and listening skills. Evidence of some reading may, to a degree, counterbalance the argument against the use of voice synthesis in language tests.

The second area is to examine the question of cognitive processing of Italian students with SpLDs when dealing with English language testing. The validity of a test relates to the interpretation of the correct responses to items. So, what matters is not what the test constructors believe an item to be testing, but which responses are considered correct, and what process underlies them. In other words, to clearly establish the trait that has been measured we need to investigate the processing necessary for task completion (Alderson 2000, 97).

In the case of the language testing of students with SpLDs, a threat to cognitive validity appears to derive from an incomplete awareness of what the real mental processes produced by these students are. As a result, it is extremely difficult to distinguish their real and effective proficiency unless we identify the cognitive features of a 'good' SpLD language learner and isolate all the elements in the test which do not activate these features

correctly.

Following Weir's (2005) suggestions, the cognitive validity of test takers with SpLDs might be investigated in two ways: modelling the skill of an expert language learner with SpLDs, and studying candidate behaviour (*verbal report*) in order to identify the features of the test that affect cognitive validity. The outcomes of such a study might be essential in ensuring that test results and their interpretation are not affected. The factors potentially affecting the results are construct-irrelevant elements of the test or personal characteristics strongly influenced by disability and relevant to the mental processes of students with SpLDs.

Further work with students with dyslexia and related SpLDs will produce detailed guidelines for good professional practice in testing the foreign language proficiency of students with language and learning disabilities in the context of the Italian education system. The guidelines will serve as a protocol for appropriate accommodations in the delivery of computer-based foreign language tests. In these guidelines, the issues of validity and fairness for all language learners are suitably addressed.

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CHAPTER TEN

READING COMPETENCE FOR SLOVENE EFL ASSESSMENT ACCOMMODATIONS IN EFL STUDENTS WITH SPECIFIC READING DIFFERENCES

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students with SRDs need to be addressed in EFL fluency and EFL factor in the group of students with no SRDs, whereas in the group of students with SRDs the auditory-vocabulary-spelling factor was the first competence, and that the group of students with SRDs lacks these skills orthography skills in EFL are important for efficient EFL reading factor. This finding might indicate that well-developed fluency and in EFL was administered to both groups to gain a perspective on the EFL reading competence structure of this population. On the basis of orthography skills. Thus, assessment accommodations and modifications for the group of between the two groups. The fluency-orthography factor formed the first exploratory factor analysis, it was found that the latent structures vary students with no SRDs. A battery of cognitive, language and literacy tests Slovene EFL students with specific reading differences (SRDs) and 292 the English as a foreign language (EFL) reading competence of 283 The purpose of the present study was to examine the latent structures of

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influenced by numerous linguistic, cultural and educational factors. When is challenging. It is a complex task and reading in an EFL context can be Assessing English as a Foreign Language (EFL) reading competence

determined by making assumptions about the hidden (latent) causes of those Latent structures are defined as correlations among observed variables variables.