

Dyslexia in the Foreign Language Classroom

SECOND LANGUAGE ACQUISITION

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Introduction

Naturally enough, ensuring access to information in various fields of knowledge, literacy skills exert considerable influence on our personal growth and professional development. Thus, researchers have been intensively investigating the phenomenon of reading and spelling disorders and, even more importantly from the practitioner's standpoint, ways of helping reading-impaired individuals.

Perceived as a significant commercial asset as well as a good investment in children, the ability to speak foreign languages constitutes another prerequisite of success in our fast-developing, multilingual society. Not only does it equip a person with a useful tool for international communication, but it also enhances an individual's chances of getting a position on the professional ground. The necessity of possessing the command of a foreign language has been well recognised by the authorities, which resulted in a foreign language requirement becoming a compulsory part of educational systems. Viewed as an advantage, recently bilingualism has become a social necessity, allowing people to face the challenges thrown up by the united, frontier-free Europe.

The foreign language requirement forms an integral and compulsory part of educational systems. Apparently, fulfilling this requirement seems to bring about considerable difficulties in many students with dyslexia. This is because the specific reading and spelling problems they encounter frequently prevent them from accomplishing this social and educational demand. Weaknesses such as poor decoding and remembering, slow processing and retrieving linguistic information, mainly on the phonological level, are believed to be salient features of individuals with dyslexia, leading to educational achievements much below their intellectual potential and requirements posed on them.

Students with dyslexia tend to face difficulties in foreign language learning (FLL) and, in fact, the problem is associated with native language learning. Ganschow and Sparks (Ganschow *et al.*, 1998; Sparks, 1995; Sparks *et al.*, 1989, 1998a) plausibly show that for individuals with dyslexia, native language learning poses variable difficulties, which then translate into similar problems in foreign language learning. It follows that the skills of an individual in the native language components of linguistic coding form the cornerstone of successful foreign language learning. It has been shown that the performance on standard measures of native language skill is related to the level of foreign language

proficiency. Namely, higher levels of oral and written foreign language proficiency are achieved by the students who exhibit higher levels of native language skills. Thus, difficulties in reading, writing, listening and speaking, be they subtle or overt, existing in the native language are likely to be responsible for similar difficulties in foreign language learning. The most noticeable deficit concerns the inability to consciously isolate and manipulate the sounds of language and relate them to the appropriate written symbols – letters. Suffice it to say that poor native language skills may significantly impede the process of foreign language learning.

In the modern foreign language classroom, where emphasis is put on authentic situational contexts, the almost-exclusive use of the target language and the inductive acquisition of grammar, pronunciation and spelling, the needs of students with dyslexia are hardly catered for. Learners with dyslexia require explicit and structured instruction. A direct structured multisensory instruction (MSL) in the phonological/orthographic system of a language has unequivocally proved successful in teaching reading and spelling skills to children with dyslexia, not only in their native language, but also in a foreign language (Crombie & McColl, 2000; Ganschow *et al.*, 1998; Jameson, 2000; Miller & Bussman Gillis, 2000; Nijakowska, 2008; Sparks *et al.*, 1989, 1992b, 1998c; Sparks & Ganschow, 1993).

In the multisensory approach, it is assumed that the more modalities are involved in the learning process, the more effective it is. Multisensory methods utilise simultaneous engagement of several sensory channels and the synthesis of stimuli coming from these channels. Thus, teaching reading and spelling is realised by the integration of visual, auditory, kinaesthetic and tactile stimuli and involves simultaneous presentation of information coming from various senses (Bogdanowicz, 1997a/2000; Ganschow & Sparks, 1995; Jędrzejowska & Jurek, 2003; Sparks & Ganschow, 1993; Sparks *et al.*, 1991, 1998c; Thomson & Watkins, 1990). In order to minimise the literacy problems of children with dyslexia, it is necessary to automatise their skills through carefully designed, monitored and long-term training (Nicolson & Fawcett, 2001). Unfortunately, in many cases, neither special methods of teaching foreign languages during regular teaching hours nor special classes outside school are offered to students with dyslexia. Foreign language teachers' awareness of developmental dyslexia still seems rather poor. Those who are familiar with the problem and want to help their students with dyslexia become discouraged by the lack of materials designed especially for teaching foreign languages to dyslexics.

In most educational systems, the foreign language requirement is compulsory. Many foreign language teachers are likely to be faced with the challenge of teaching learners with dyslexia. It follows from the above that by far the most important issue seems to be raising awareness

among pre-service and in-service foreign language teachers of the nature of dyslexic difficulties and effective teaching methods. There exist great social demand and pressure on teachers to be able to understand and help students with special educational needs. Also, foreign language teachers themselves feel the need to broaden their professional knowledge. They repeatedly report being in need of a comprehensible guidance on how to work with children with dyslexia, since these issues rarely constitute a part of curricula realised during teacher training. It seems especially crucial in light of the necessity to create equal educational opportunities for all children. Teachers are expected to accommodate their educational requirements and examination conditions to the individual needs and abilities of students with dyslexia. However, too often, there seems to be a considerable mismatch between the legal educational law concerning individuals with dyslexia and the way it is executed in school practice.

There is a wide spectrum of publications concerning both the theoretical and practical aspects of the phenomenon of dyslexia; however, they are prepared mainly for psychologists, teachers-therapists, native language teachers, kindergarten and elementary education teachers. Very few publications on dyslexia are addressed specifically to foreign language teachers. This book aims to fill this gap and present the problem of dyslexia from a foreign language teacher's and cross-language perspective. It is intended to serve as a reference book for those preoccupied with foreign language teaching, including experienced in-service teachers, novice teachers as well as teacher trainers and trainees. My intention in this work is to provide the reader with a concise overview of the current research, both its theoretical and practical aspects, in the field of specific difficulties in learning to read and spell – developmental dyslexia. Understanding the phenomenon of dyslexia requires interdisciplinary knowledge. Advances in the fields of science such as psychology, pedagogy, neurology, biology and linguistics contribute to the explanation of the nature of this learning disorder. Equipped with greater awareness as well as solid background knowledge of a wide spectrum of the theoretical and practical aspects of the problem, one can more efficiently help children with dyslexia. It is hoped that the book will help teachers to face one of the many challenges that the educational system poses on them nowadays, namely, the organisation of an effective teaching process for students with dyslexia, which is accommodated to their needs and abilities.

Terminological issues related to dyslexia, together with a definition of the disorder are covered in Chapter 1. The potential to develop literacy skills and the need to do likewise are fundamental. Abilities to read and spell are complex and multilevel in character and engage several physical, physiological and psychological phenomena. Chapter 1 discusses the

issues of general readiness for learning to read and write and best predictors of reading success. The focus then shifts towards the nature of the reading process, strategies, developmental stages, to finally touch upon the issues of orthographic depth and grain size. Reading and dyslexia are discussed from a cross-language perspective, highlighting the similarities and differences between dyslexia manifestations and literacy acquisition in different languages.

Due to the complex nature of dyslexia, any organised attempt to understand its multiple facets should involve the analysis of its underlying causes. Chapter 2 is devoted to both the neurobiological substrates and cognitive correlates of dyslexia. It familiarises the reader with the major facts and hypotheses and presents selected findings from massive research. As already mentioned, phonological processing impairments responsible for the specific reading disability in the native language may similarly impede the acquisition of foreign languages. Chapter 3 deals with the issue of native language-based foreign language learning difficulties and includes the verification of the notion of a disability for foreign language learning versus continuum notion of language learning differences.

Dyslexia is a lifetime condition, one does not grow out of it, once qualified to have dyslexia a child continues to demonstrate symptoms of the disorder, altering in range and severity, into adulthood (Gregg *et al.*, 2005; Snowling, 2001a). The ways dyslexia leaves its imprint on behaviour varies across individuals. In addition, throughout life, symptoms of dyslexia manifest in a given person are subject to dynamic change. These issues as well as the problem of identifying the cases of dyslexia among the multitude of poor readers are addressed in Chapter 4. There is general agreement that early diagnosis of learning disorders is pivotal to the further educational career of at-risk children, however, various universally applicable but also country- and language-specific factors seem to influence the assessment procedures. There is increasing and widespread sensitivity and concern over the issues of literacy acquisition and assessment of reading disabilities among school children in multicultural and multilingual settings, in particular those who learn English as a second or subsequent language. This issue is also referred to in Chapter 4.

Supporting individuals with dyslexia in their attempts to overcome reading and spelling difficulties, experienced both in their native language as well as in the second or additional language that they frequently struggle to learn, is a standing challenge for teachers. Chapter 5 is concerned with treatment and educational accommodations for children with dyslexia, it revises teaching principles and methods, with special attention given to a multisensory structured approach and its application in the foreign language context.

Chapter 6 comprises a collection of activities, worksheets, games and movable devices that are designed to enhance the sensitivity to and foster the acquisition of phonological, morphological, orthographic and, last but not least, grammatical aspects of the English language. The orthographic awareness section contains a set of sample activities selected from the programme used in the small-scale intervention study described in Chapter 5. The study concerned the effectiveness of direct multisensory instruction for improving word reading and spelling skills in English as a foreign language, through the systematic study of selected grapheme-phoneme relations, spelling patterns and rules. The activities proposed in the book may be used during additional classes conducted with students with dyslexia, either for one-to-one lessons or for group work, however they can equally well be incorporated into the regular classroom routine.

The feeling of success is especially important for students with dyslexia, who frequently experience failure in their educational endeavour because, needless to say, an individual constantly confronted with an unattainable challenge can, eventually, become frustrated and discouraged. In addition, confusion caused by an inadequate teaching approach and by requirements that are impossible to fulfil, deprives individuals with dyslexia of the feeling of joy and satisfaction brought about by learning. Teachers' sensitivity and awareness of the nature of dyslexic difficulties and ways of overcoming them can definitely help to steer clear of such danger.

Chapter 1

Becoming Literate

Defining Dyslexia

Terminological issues

This book is devoted to a developmental cognitive disorder, more precisely, to a specific learning difficulty in reading and spelling – *developmental dyslexia*. To begin with it is important to ensure terminological and definitional clarity, which would be most helpful for appropriate understanding of the described phenomena. Reading disorders are quite intensively studied and several terms have been proposed in different countries to denote reading deficits of various kinds, in children and adults alike. Apparently, such a situation is a consequence of the complex nature of the skill in question as well as the diverse causes and multiple types of reading and spelling disorders.

Let us focus first on the distinction between *acquired* and *developmental disorders*. Acquired reading and spelling deficits result from brain injury or disease and connote either total or partial loss of the already possessed ability to read or spell. The intensity of symptoms largely depends on the size and location of the lesion as well as the age of the person. *Acquired alexia* and *acquired agraphia* are spelled out as a total loss of the faculty of reading and spelling, respectively, while *acquired dyslexia* denotes only a partial disappearance of reading competence, and *dysgraphia* is a partial loss of spelling ability. To stress again, acquired reading and spelling disorders are connected with deficits in qualifications that a given person, be it an adult or a child, had already possessed prior to brain injury (Bogdanowicz, 1989, 1999; Krasowicz, 1997).

Acquired reading disabilities in adult patients are often taken as a model for interpreting and achieving further understanding of the neurological concept of developmental reading impairments (Borkowska, 1997). However, such an approach is rejected by Hulme and Snowling (2009), who advocate investigating developmental reading disorders in children by relating them to patterns of typical reading development in children. Much as adult models usefully specify what normally constitutes a result of development, they do not describe the development itself. Reading development undergoes certain changes over time as children develop, thus, naturally, younger children are less accomplished in this respect than older children. Developmental disorders would typically involve modified – slowed down – rates and patterns of change. Children with dyslexia will learn to read slowly

and with difficulty and this delay in the rate of the development of the reading skill is claimed to be the most salient and striking characteristic of this disorder.¹

Developmental disorders can be divided into *specific (restricted)* and *general difficulties/disorders*. General disorders concern deficits in most, if not all, cognitive functions. By contrast, specific disorders refer to situations where impairment in just one or a limited number of skills is involved, while functioning in other areas remains typical. Krasowicz (1997) suggests further division of specific developmental reading disorder into *specific decoding disorder* and *specific comprehension disorder*.

In the UK, such a specific (restricted) difficulty, which involves a selective (occurring in a restricted domain) impairment in acquiring a skill that must be learned, is referred to as a *specific learning difficulty*; whereas *global learning difficulty* concerns problems in acquiring a wide range of skills and in understanding concepts. In the USA, the terms *learning disorders* and *mental retardation* are used to denote specific and global learning difficulties, respectively. In practice, the results of a standardised IQ test (a measure of general intelligence) are used to distinguish between cases of specific and general learning difficulties.² The diagnosis of specific learning difficulties is frequently conditioned by the achievement of IQ score within or near the average range, while general learning difficulties are diagnosed in children with IQ scores below 70.

Specific developmental reading disorder – developmental dyslexia is one of the most intensively researched, best known and understood specific learning difficulties. Specific learning difficulties experienced by children with dyslexia concern acquiring reading and spelling skills, while the ability to understand concepts is normal. In addition, they often demonstrate talents in various areas of study – in science, sport or art (Hulme & Snowling, 2009).

Developmental dyslexia has its place in the international classifications of diseases, mental disorders and related health problems. In the 'International Classification of Diseases and Related Health Problems, Tenth Revision (ICD-10)', specific difficulties in learning to read and spell are classified as follows: general category – *specific developmental disorders of scholastic skills*; specific learning difficulties in reading – *specific reading disorders (developmental dyslexia)*; specific learning difficulties in spelling – *specific spelling disorders*; specific difficulties in acquiring the technique of writing due to lowered motor ability and motor coordination of hands, which is characterised by a very low graphic level of writing – *specific developmental disorder of motor function*. For the sake of comparison, in the 'Diagnostic and Statistic Manual of Mental Disorders, Fourth Revision (DSM-IV)', the following notions have been introduced: general category – *learning disorders*; specific reading problems – *reading disorder (or dyslexia)*; specific writing problems – *disorder of written expression*; specific technical

problems in writing – *developmental coordination disorder* (Bogdanowicz, 2007).

The notion *dyslexia* can be understood as a narrow concept, comprising solely of a difficulty in reading or as a whole syndrome of specific difficulties in learning to read and spell, indicating the coexistence of reading difficulties with spelling impairments (pertaining to both poor orthography and graphic level) (Borkowska, 1998; Pętlewska, 1999; Zakrzewska, 1999). Drawing on clinical experience, Bogdanowicz (1999) has suggested that isolated reading and spelling disorders can be diagnosed apart from the whole syndrome of specific difficulties in learning to read and spell. For example, a spelling disorder may arise that coincides with neither a reading disorder nor poor graphic level of writing (developmental coordination disorder). However, according to Szczerbiński (2007), as much as dysorthography (specific spelling disorder) may happen to be dissociated from dyslexia, the reverse case is extremely rare. Most usually, low-level performance of decoding and encoding coexist. Bogdanowicz (1989, 1997b, 1999) uses the term *developmental dyslexia* to signify the syndrome of specific learning difficulties in reading and spelling as a disorder of written communication. Within this syndrome, she identifies three isolated disorders: *dyslexia* – to symbolise specific difficulties in learning to read (poor decoding), *dysorthography* – specific spelling difficulties (poor encoding) and *dysgraphia* – specific difficulties in acquiring the appropriate graphic level of writing. The above terminology has been widely used in Polish publications (Borkowska, 1998; Juszczak & Zajac, 1997; Knobloch-Gala, 1995; Krasowicz, 1997; Miązek, 2001; Pętlewska, 1999; Sawa, 1999; Zakrzewska, 1999; Zelech, 1997 and others). Much as the abovementioned terminology has gained wide acceptance in Poland, the terms may be interpreted differently in other countries. By way of example, according to Smythe and Everatt (2000), in Italy, *dysgraphia* denotes motor difficulties, while *dysorthography* refers to spelling difficulties; however, the term *dysgraphia* is used as synonymous with spelling difficulties as well. Yet, in Russia, *dysgraphia* stands for a spelling disorder characterised by inadequate usage of graphemes or syntactic impairments, whereas *dyslexia* refers exclusively to a reading disorder manifesting itself in a slower rate of reading, paired with numerous persistent errors.

All in all, *dyslexia*, often qualified by the adjective *developmental*, is the most popular and internationally accepted expression denoting specific difficulties in learning to read and spell, specifically with regard to decoding and encoding single words, which come into play in children at the beginning of school education (Critchley, 1964; Krasowicz, 1997; Ott, 1997; Reid, 1998). Additionally, apart from *dyslexia* and *developmental dyslexia*, several descriptive notions, such as *learning difficulties*, *learning disabilities*, *specific reading disorders* or *specific learning difficulties/disabilities*,