

Learning to read: suggestions for teachers and educators regarding dyslexic children

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ABSTRACT

Problems in reading development are part of Specific Learning Disorders, which are called dyslexia. The main objective of the research is to synthesize the most important theories, authors and researches results on dyslexia to create guidelines for teachers and educators. The guidelines will be helpful in the education and teaching-learning process at school to support teachers in their educational and didactic choices. In fact, every dyslexic child has a personal profile that has to be identified, in order to support him/her in the learning path with the right instruments and advice. The purpose is to work out a table containing details on different approaches to dyslexia, such as authors, theories, hypothesis on causes, educational and didactic methods, technological devices, games, etc.

KEYWORDS: *dyslexia, educational and didactic approach, guidelines, specific learning disorder*

1. INTRODUCTION

The history of our ancestors makes us understand how the learning of reading is a cultural invention of the human being. Each country has adopted conventional systems of graphic symbols to represent the sounds used to communicate in the oral speech. Learning to read has to be conquered. The reading and writing skills are not something natural, but are a social superstructure which needs to be acquired in the first years of education. In fact, different cultures have adopted conventionally their own systems of graphical signs standing for sounds used to communicate [1,2]. Therefore, learning to read and write is a daily achievement of every individual, having only in part to do with cognitive processes. Children with learning disabilities aren't lazy or dumb. In fact, most are just as smart as everyone else. Their brains are simply wired differently. This difference affects how they receive and process information. Actually, dyslexia is a common type of learning difficulty that primarily affects the skills involved in the reading and spelling of words in children of all intellectual abilities, from low to high intelligence. Difficulties with reading and writing, often called 'developmental dyslexia', is a complex condition which in some cases presents with other difficulties in maths, short-term memory and concentration. The difficulties in reading and writing learning process, known as Specific Learning Disorder [3] have been the main topic of a lot of studies and research along the last 20 years. The ability to read and write is a very complex process distinctive of these sophisticated skills, involving a wide range of functions, such as cognitive and secondary aspects (visual-spatial attention [4,5], hearing attention [6] motor-skills [7] phonological [8]

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psychological and emotional aspects [9] visuo-auditory-kinesthetic-tactile functions[10,11], perception[12]). Hence, unlike the rather easy process connected to oral learning, reading is a much more hard process which can represent a real obstacle for a lot of children. However, dyslexia must not be considered an intellectual deficit, as it has been shown in a lot of researches.

Researches on dyslexia are in ongoing evolution taking on a new direction every time. With the present research we aim at providing a general view of the studies, putting forward the main viewpoints of the experts working in this field.

2. THE RESEARCH PROPOSAL

2.1 The Aim of the Research

The final aim of this research is work out some guidelines for teachers and educators working with dyslexic children. The guidelines are intended to be a reference tool and a helpful resource for students with special needs in a learning environment. Its primary purpose is to look at some of the wide issues that can affect teaching and learning processes with these students. These guidelines can be used by all teachers, and should also be accessible to a range of other experts directly involved with the student's education, at all levels or in other educational settings. In detail, specific objectives are:

- providing useful information on the causes, symptoms and diagnosis of dyslexia, as well as presenting practical teaching techniques and methods to implement in the classroom;
- documenting a wide variety of methods and approaches;
- fostering educational strategies that work on strengthening the learning skills;
- suggesting strategies a teacher can implement in the classroom to help a dyslexic student do well and understand the different skill sets, such as spelling, reading, writing;
- listing strategies, teaching techniques and approaches incorporated by teachers into the teaching process that may help dyslexic learners overcome their difficulties.

2.2 Method and Activities

The first step of this research was to look for the most important theories and research results, different kinds of treatment and therapies. The sources at the basis of our research are at international level, examined in their original language. In all the theories we took into account some aspects such as:

- authors of the theories
- definition
- core symptoms
- key words
- training and methods
- research results
- strong and weak points of the theory
- level of curiosity and interest
- Bibliography and websites

After comparing and selecting the observed data, a meaningful synthesis has been worked out. The second step focused on a possible match of didactic and educational games as well as technological devices to specific cases of dyslexic children. Every game is associated to a specific theory in this field, thus supporting students who struggle with Reading, Writing, and

Spelling to build up lost confidence, give opportunities for self assessment; encourage attendance at study skills workshops and make them willing to study.

The following step is to work out a desk research where we will demonstrate the benefits of all kinds of games according to some criteria such as:

- age
- target
- brand
- source of production
- year of production

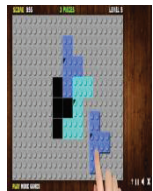
3. RESULTS

The research is still in progress: it started in January 2013 and will end in November 2015.

3.1. *The main outcome*

One of the main product consists of a table with the fundamental theories and the researches' results in order to create guidelines for teachers and educators. The outcome of the current research can make educators aware about the problems and the possible solutions to take into account these children. An individual didactic approach will be fostered and effective improvements will inevitably be proved, thanks to these considerations.

Here is an example of the scheduled data:

Name of Theory	Authors	Definition	Core symptoms	Key words	Type of research	Research result	Educational games or technological devices	Reference
Visuo-spatial deficit	M. Lipowska	The visuospatial deficit is recognized as typical for dyslexia only in some definitions. However problems with visuospatial orientation may manifest themselves as difficulties with letter identification or the memorizing and recalling of sign sequences, something frequently experienced by dyslexics.	Space-time organisation disorders; Laterality disorders; Inadequate awareness of the body image.	Specific learning difficulty Visuo-spatial working memory dyslexia Attention skills	The experimental group consisted of 62 children with developmental dyslexia. The control group consisted of 67 pupils with no diagnosed deficits, matched to the clinical group in terms of age. They used the Clock Drawing Test (CDT), the Spatial Span subtest from the Wechsler Memory Scale—third edit.	Level of performance of a drawing by 10-12-year-old students with dyslexia was typical for children aged 8.	Legor 3 	Lipowska M., <i>Dysleksja i ADHD</i> , Wydawnictwo Naukowe SCHOLAR, Warszawa 2011

3.2. *Further developments*

As secondary results the following items are expected:

- working out a whole table with some tools to help *teachers* to support pupils with *dyslexia*;
- providing teachers and educators with advices and methodologies to follow in the teaching learning process;
- bringing a list of possible solutions to facilitate learning and creating successful class environment for students with dyslexia.

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