## MATHEMATICAL LEARNING DIFFICULTIES

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PROCESS

- **RESOURCES**
- ASSESSMENT

# INTRODUCTION

Robert is a boy in 2nd grade of ESO ("Educación Secundaria Obligatoria", in English, Compulsory Secondary Education) who has trouble with math. In the rest of the subjects, his performance is average, except for those in which he has to solve numerical problems. At this point, he handles the concept of number perfectly, as well as the ability to count and number objects. He can do isolated calculations and operations at the same level as his peers, but he has a major difficulty solving mathematical problems. He tends to answer the problem mechanically, on the basis of some numbers and key words of the sentence, which often confuse him. Interestingly, Robert does not have any relevant difficulties in literacy. His previous schooling was adequate, typical of his age, and his



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# TASK

do?

If you were his math teacher, what should you

That is your task! Find the way to teach your students with mathematical learning difficulties. To do so, investigate Robert's problem! Diagnose him and try to find resources to teach him.

Write a document in which you include:

- a) a) What are mathematical learning difficulties?
- b) b) What types of mathematical learning difficulties are there? What are its main symptoms? What type does Robert have? Why?
- c) What methods could be used to treat a student with mathematical learning difficulties? And, in particular, with Robert? Use concrete examples.



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PROCESS

# PROCESS

1st) Carefully read the proposed case and the posed task.

2nd) Explore the available references in the "Resources" section to complete the task. This is a basic bibliography that has been selected for its rigor and appropriateness to the case. However, you should add to this information through a personal search of complementary bibliography.

3rd) Prepare a written document, responding to the points raised in the section "Task". The maximum length is 7000 words.

4th) Do not forget to always quote the consulted sources. You can consult the citation / referencing rules in the last link in the Resources section.

5th) Send your work to the teacher, for its assessment, via email.



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The DSM, together with the ICD, is one of the worldwide reference classifications of psychological and behavioral disorders. In 2013, its latest version was published: the DSM-5. In this link you can access this diagnostic manual. Between pages 66 and 74, you will find the diagnostic criteria of the Specific Learning Disorder, within which is the specific learning disorder of impairment in mathematics.

<u>Mathematical learning difficulties subtypes</u> <u>classification</u>

DSM 5

This article presents an interesting proposal for the classification of mathematical learning difficulties.





<u>Mathematics instruction for students with</u> <u>learning disabilities or difficulty learning</u> <u>Mathematics. A Guide for Teachers</u>

This document describes some recommendations to facilitate the learning of students with mathematical learning difficulties.

## APA Style



This website provides the Basics of the APA Style Tutorial. For the drafting of your work, Slides 13 to 24, which show how to quote and cite a publication, are particularly interesting.

ASSESSMENT

Drafting

**INTRODUCTION** 

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	4	3	2	1
Preparation	The work is the student's personal elaboration.	Isolated fragments have been copied, without citing the source.	Most of the text was copied.	The text was completely copied from other sources.
Quality of the information	Many and contrasted sources of information have been used. The information is clearly related to the problem question	Some contrasted sources of information have been used. The information correctly responds to the problem questions.	Few contrasted sources of information that were directly related to the question problem were used.	Information sources are not cited. It does not address the problem questions.

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# CONCLUSION

With this Webquest you will have learned important information about the Mathematical Learning Difficulties. This is a learning disability that you will probably encounter in your future professional practice. At your school, you will have the support of various specialists trained in the diagnosis and treatment of this type of difficulties. However, it is important for you to at least have a basic idea of the subject, to identify possible cases in the classroom or to apply effective learning methods with the help of your fellow specialists.

