

Calculating a Response to Dyscalculia: What to Do When Your Child is “Number Blind”

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Do you know any children or adults who struggle with maths? Perhaps they have difficulty with basic maths skills and seem unable to understand what maths process to use with which problem. Maybe they are unable to organize objects in a logical way or have difficulty with measurement of either time or money. If you know people with these types of struggles, they may have **dyscalculia**.

Dyscalculia, also called “number blindness” or “numerical blindness,” is a learning disability that inhibits a person's ability to use and have a proper sense of numbers. Literally meaning “bad counting,” dyscalculia is estimated to impact three to six percent of the population so is just as prevalent as dyslexia but often goes undiagnosed since those with this disability often excel in reading and other subject areas.

Many people believe that maths can be a difficult subject to teach or that some students just don't “get it”. But for those who truly have dyscalculia, it is not about how the subject is taught; it is a lack of number sense. Two main areas of weakness may contribute to this learning disability:

- Visual-spatial issues and language processing difficulties. With visual-spatial weaknesses, the learner has a problem processing what the eye sees so he or she may have difficulty visualizing patterns or parts of a maths problem.
- Making sense of what the ear hears is the issue with language processing weakness which leads to a hard time grasping maths vocabulary and building on maths knowledge since there is a difficulty in understanding what the words represent.

Identification of any learning disability requires a trained professional who can evaluate a student to determine areas of strengths and weaknesses in learning. An in-depth assessment compares what the student's expected level of performance is to what he or she actually can do in areas of mathematical skill and understanding.

It also is helpful for at least an overview of this information to be shared with the student (especially the strengths) since knowing how you learn best is a good way to help students learn to compensate for difficulties and to build academic success and confidence.

So what can be done for those who have dyscalculia?

- The first step is for parents, teachers and other educational specialists to use the evaluation results to develop strategies to address the student's maths skills.
- Some will benefit from additional tutoring that adjusts the learning pace and focuses on specific areas of difficulty with repeated reinforcement of key skills.
- For those with visual-spatial weaknesses, using graph paper can be helpful for organising ideas and for those with language processing issues, clear explanations and frequent checks for understanding are important.
- And, as with most students with learning disabilities, having all of the needed materials and working in a place with limited distractions is always a good idea!

As with any learning disability, the earlier that the dyscalculia can be identified and remediated, the greater the chance that your child will stay on track or stay motivated to catch up.

Talking with your child's teacher is the best place to start so make that call or, if the teacher has contacted you, be open to their concerns. As your child's advocate, you can help make the difference in gaining access to the right resources to help your child work through learning challenges and achieve academic success.