



Tool Description

GeoGebra is an online graphic calculator that allows students to make experiments with the math concepts they are learning at school. It can solve problems, draw functions, calculate statistics, represent geometry, trigonometry and much more. It can be easily used by anyone as it is rather user-friendly.

Many math teachers use it in their classrooms and the tool has been rewarded with many educational software awards. It is a great and fast way to show students how mathematics work, even when making complex calculations.

What is the challenge the tool can solve?

Children with DYS:

- Have difficulties graphing on the Whiteboard because of time or quality of drawing skills. Working with complex numbers and operations
- Have a hard time grasping information shown on graphs or charts.
- Can present difficulties in numeracy skills
- Need more than one type of representation of the learnt concepts

What are the benefits for Dys persons?

There are a lot of good open source programs out there, but not many of them have direct application to a mathematics classroom the way GeoGebra does. GeoGebra is a software package for creating and manipulating geometric objects.

GeoGebra is a dynamic software of mathematics bringing together geometry, algebra and calculus. It was developed for educational purposes for high school by Markus Hohenwarter, from the University of Salzburg. It also allows for graphing of functions and manipulating the functions in all sorts of interesting ways.

Example of use in daily life

If you are planning on using the program with your students, it is nice to know that they can install the program for free, and that it is very likely to work on their computer. Geogebra has all of the standard Geometry software functions. You can add lines, circles, ellipses and all other sorts of geometric functions to the document. You can also make one object a dependent of another object which means that changes in the original object propagate to its dependent objects. So in other words, if you draw a line segment which depends on the location of point A and point B, changing either point A or point B modifies the line segment.

You can find it here: <https://www.geogebra.org/graphing>

Here is how it can be used to represent a function:

