

More About the Brain 1st Program at Star of the Sea

The number of children struggling today with learning delays, motor delays, or even emotional struggles like anxiety are higher than ever. The range in which children are experiencing these issues is anywhere from mild to severe, but many parents recognize something in their children that may concern them whether it's just something little or something much larger. The goal of the Brain 1st Program is to help improve children with any of these struggles with a simple and fun program designed to stimulate the brain in a beneficial way. The program is not designed to replace any existing or future therapies children may be receiving. Instead, it is to compliment these areas and its goal is to create plasticity in the brain in areas that we know benefit how children learn and behave. It has been our goal to create something as comprehensive as possible that can be carried out in a classroom setting to have the greatest benefit on the most amount of children. The program will not replace any other aspects of curriculum, rather it will be incorporated into the 30 minutes of Daily Physical Activity that each classroom currently carries out within the day.

Research and literature spanning the course of decades has all pointed to the fact that movement and learning cannot be separated and that specific movements can promote further learning and brain development. Programs similar to the one we have designed have been trialed in various countries within Europe as well as in Australia and all have had incredible results. The more specific the movement for the brain, the better the outcomes.

Within the program, we have included something called Primitive Reflexes. Primitive Reflexes are something that every single person develops within the womb and are born with. These reflexes include the startle or Moro reflex (when you startle your baby and it's arms flail outward and then back in) and are all designed to aid in early survival. As the brain develops, it overrides these reflexes and more complex pathways are created in the brain. It has been found that a number of children did not properly override these reflexes and there have been significant links between this phenomenon and learning and behaviour. There are however, a series of movements that remediate these retained reflexes and with repetition the brain can be repatterned correctly. We attempt to include as many of these reflexes within our program. If the reflexes are not retained, it is not harmful to do these movements. They are slow and purposeful movements that will help stimulate any brain and may improve overall coordination as well.

We have also chosen specific music that has been demonstrated to put the brain in an awakened but calm state and also positively stimulates the social engagement part of the brain. The social engagement part of the brain activated in a calm and unthreatened state would be very beneficial in a classroom and school environment. Slow and deep breathing is also incorporated into every video which has numerous benefits in children.

Specific and gentle eye exercises have also been included as these are paramount on the ability to learn, especially reading, copying from the board, etc. We have also added vestibular stimulation, using various head and eye movements along with lots of different balancing exercises.

The data that is being collected is simple and non-invasive to the students. There will be a quick social emotional scale the children will fill out that asks them to rate how regulated they feel at various points within the day or during certain activities. These have been done in the past with students. The other data involves checking the level of balance and sway on the students. The Brain 1st Program has teamed up with some Functional Neurologists from Chicago who have designed an App to test specifically this. These doctors have designed this application in order to better correlate the affect of balance with learning difficulties, specifically reading. The children will be asked to just stand with their feet together and then close their eyes while holding an iPhone. The App then measures their exact amount of sway and in which direction. This will be checked