A very good evening to everyone present here , under the guidance of dr E vijayaragavan sir , I PUSHPAL DAS AND MY TEAM MEMBERS , THE NAMES , ARE HONOURED TO PRESENT OUR IDEA FOR THE TOPIC TOYS FOR AUTISTIC KIDS

ABSTRACT

The main objective of our team is to **make a toy for kids who suffer from autism ,** spectrum disorder , or autism, term used to describe a group of neurodevelopmental conditions. Our team came by the resources , so according to specialists it has been found that that , through out the ages of digital transforming world when it is an e learning platform and autism , a proper output has not been observed as a result of it we actually could not predict whether the kid is getting addicted with e learning materials or he/she is actually learning it, at the same time to deal with neurological problem we know that their brain isn't mature enough for a gripping power , fine and motor problem , which is found in maximum autistic kids , which is a neurological problem . Our team aim is to create an interface between a mechanism or a hardware with an e learning software or application

PROBLEM STATEMENT

Neurological problem is observed in maximum autistic kids. The fine motor and the gross motor problem is what they suffer from.

Hence they find it difficult in writing , imagine how painful it is for an autistic kid to deal with such problem provide the case that they want to learn and write.

SOLUTION

what our team is trying to create a loop between the play and physicial therapy , resulting in a therapy to kids who have writing problem from their very childhood , kids who have difficulty to understand between 6 and 9 , b and d , the alphabetical order , a step from our team to make the basics strong and solve the neurological problem in kids.

As by the research we undergone and by the resources we can come to the point that autistic kid faces lots of problems with their sensory nerves and their gross motor and fine motor and so on. We are working on a project with an idea of making the kid to learn by making the kid to hold an artificial hand (robotic arm) or the mechanism as we said as the hardware , which has the ability to track the pattern of the letter and to guide the kid to move their hand in the right way to complete the pattern by interactive methods. Interactive methods will be the input given from the phone or the device where the mentor or the guide will download the application or the software from. And here We hope our idea would bring the changes in the kid positively.

ANALYSIS

- Our team have taken analysis of the project report into five major parts:
- Define
- Design
- Implement
- Analyze
- Share

We define our project as a major part or a revolution to bring a change for autistic kids having neurological problems. Not onely that our device completely focuses on the visual effect to make it more fascinating for the kid to make a contrast in its mind between a TLM and play. TLM is nothing but the teaching learning material .

About 1 in 54 children has been identified with autism spectrum disorder (ASD) according to estimates from CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network. About 1 in 6 (17%) children aged 3–17 years were diagnosed with a developmental disability, as reported by parents, during a study period of 2009-2017. These included autism, attention-deficit/hyperactivity disorder, blindness, and cerebral palsy, among others. As a target and a goal to achieve it is our duty to serve with the best possible technology as TLM to autistic kids.

We designed our model My hand in a manner that it is fascinating enough and also will be used a learning material to make autistic kids write. When we talk about the design , we carried surveys. Our main key points by the respected

authority of the autistic cares or school, was that to make it glow with colors and comfortable for the kid to use it by its guide.

In our machine we need two users to control and learn from it. When I say control we are expecting a guide to input letters, words or numbers in the mobile phone. There by when the machine runs it writes A on the sheet of paper. As of now if we implement the idea it won't be fascinating to the kid to use it, but there are visual effects too, there are two phases of this TLM, My hand.

For example the mentor used the phone to select the letter 'A' , the kid follows the visuals and the animation on the e learning platform and later our machine interface makes them write A with a single touch by the user.

Implementing the three things our team can surely change the vision of a CNC handwriting machine which is only made for purpose to print , but here we are connecting many dots together towards an environmental step in curing the neurological problem of an autistic kid , who have writing problem. When I say dots our team has brought a whole idea of CNC machine to reality to make it as a part of a toy and also as a teaching learning material ,which was very much recommended in the surveys , when we mentioned about the idea we are applying.

Thereby I share this particular contrast of a toy , where it can serve dual purpose and a visually fascinating thing for the kid to learn with it.

CONCLUSION

Finally, our team has come up with the conclusion that living in the 21st century where kids are born and brought up in the age of technologies and the digital world we must fix and deal with such challenging problems. Often people do have e-learning software but again, we fail to realize how it really affects the kids and also helps the kid to grow and evolve. Growth is a very essential part of life, and growing with just a digital interface is not what our duty is. Our duty is to make it efficient and worth the time and money they have spent on their development. We depict or define our machine or an artificial hand as a scope to neural science in future. We know that not only autistic kids but many people do face neurological problems where if they want to write they cannot do so but our machine the robotic hand will automatically create an impact on the disabled person. The combination of the concepts of Mechatronic and neuroscience will create a huge impact and make learning very easy for every person suffering from neurological problems. We create the future a place for great effortless learning and writing.