

SticKey Communication Made Easier!

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Individuals with fine motor impairments often find themselves with limited means of communication and interaction in a society that is dependent on technology; the SticKey is the solution. The goal of our assistive typing device is to provide a means of communication, therapy, and self-confidence to its users through a low-tech and affordable unit. The SticKey consists of two joystick units, one a color selector and the other a letter and character selector. By operating the two joysticks the user can type letters, characters, and switch to mouse mode. The creation of the SticKey closely followed the engineering process. The final designed enclosures were printed in our school's engineering lab on 3-D printers. In identifying the need for the SticKey we found that 48.9 million people with disabilities live in the United States and 34.2 million people have functional limitations. Throughout our extensive research and interviewing of professionals, we found a significant void in the assistive technology market for a device like ours. The simplistic nature and low-cost design of the SticKey have gained very interested partners in the future state of our device. We have embedded the SticKey into a work setting with extremely positive feedback. The SticKey seeks to make an impact on the lives of individuals in school, at work, at home, and in rehabilitation centers. The SticKey eliminates the gap between being disabled and feeling disabled by putting communication back into the daily life of the user.