**Introduction to Field: Motion Detection and Special Education**

Peter Traunfeld

//This is for the education aspect

Special education in America has its roots in the early 20th century when school attendance became mandatory for all children, regardless of personal circumstances (Ferguson 88). In order to educate students with a wide range of learning capabilities, often determined through the antiquated Binet IQ test, the school system looked to psychologists to determine which methods work for different students.

//This is for the tech aspect

If you have ever walked through the doors of a modern supermarket in America, then you have benefited from one of the many applications of motion detection technology. Motion detection at its most basic level has existed since Heinrich Hertz invented Radar. In that time, this technology has been advanced to a point such that complex human features, gestures, and point of visual focus can be tracked to great detail. Researchers Lahiri et al. developed a virtual-reality-based system for tracking eye movements in real-time in children with autism spectrum disorder (ASD) in order to augment intervention strategies and promote social interaction (Lahiri p#). The authors pointed out that children with autism tend to “fixate less towards human faces and more towards other objects within visual stimulus,” which is correlated to tendency of autistic children to miss social cues from faces (Lahiri p#). One limitation of their research stems from their use of goggles to track visual gaze; as pointed out by Chaudhary et al., practical use is greatly limited due to the fact that one must wear the technology. One of the obstacles to assistive technology, as delineated by researchers Alnahdi et al., is the abandonment of the technology by the user (Alnahdi p#).