

ETM/402 - Ultrasound Visual Biofeedback Treatment for Speech Sound Disorders in Children

Speech, Language and Communication difficulties (SLCD) are common in childhood. They pose a major challenge to society, affecting educational attainment and the social and emotional health of over one million children and young adults in the UK. The most common type of SLCD is a speech sound disorder (SSD), in which children's speech is difficult to understand. Traditionally, interventions for SSDs rely heavily on auditory skills, in that clients must listen to their own productions and modify them using auditory cues. This is difficult for children for whom auditory skills are weak and teaching children new articulations is problematic because the target articulations are difficult to see or describe. This project will use ultrasound to image the tongue in real-time, providing children with a visual biofeedback method for remediation of previously intractable SSDs.