**Use of Assistive Devices for Persons with Intellectual Disability to Travel Independently**

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***Aims***

SG Enable commissioned a 6-month project in 2017, conducted in the form of a pilot trial to test:

·       The efficacy of the use of assistive devices to train and aid persons with intellectual disability to travel independently; and

·       The hypothesis that through the use of assistive devices, caregivers could have greater ease of mind in allowing their children with intellectual disability to travel on their own.

***Method***

Thirty students with intellectual disability and very little or zero independent travel experience participated in the pilot trial, together with their caregivers. Two types of assistive devices were used in the trial:

·       **Interactive Mirror (iMirror)** – A device that uses virtual reality to simulate local environments such as road crossings and public transport system (buses and trains). Using gesture-based movements, students could learn basic travelling skills such as road safety and taking of the public transport through interactive simulations.

·       **Smart Watch / Pendant** – These devices could receive and make calls by pressing a pre-set button. Caregivers could track and monitor the location of these devices using an accompanying application on their mobile phones.

The pilot trial comprised 3 stages:

·     **Stage 1 – Pre-travel training** using the iMirror. The simulated training was conducted in schools, followed by field training.

·       **Stage 2 – Fixed Route Training** (field training) where the participants were trained by caregivers to use the public transport to travel from home to the Enabling Village. At this stage, caregivers also trained the participants to use the smart devices.

·       **Stage 3 – Trial and Evaluation** where the student participants travel from home to the designated Enabling Village on their own using the public transport and wearing the smart devices. Different scenarios were designed to “test” the participants on the use of the smart devices.

Throughout the pilot trial, field observations were recorded and interviews were conducted with teachers and caregivers.

***Findings***

The assistive devices used in this pilot trial were assessed to be effective in training and assisting persons with intellectual disability to travel independently using the public transport. With the use of such devices, caregivers are more willing to allow their child to travel on their own.