

# SAHK

Citation: Cheung, M. K., Su, Y. W. (2016). *Application of Information and Communication Technology (ICT) and adaptive aids to promote active participation for students with severe multiple disabilities under the Conductive Education system*. Abstract of the 9<sup>th</sup> Congress on Conductive Education, Budapest, Hungary.

**Introduction:** With rapid advancements and cost reduction, ICT becomes increasingly affordable, mobile and user-friendly. This has brought about great conveniences to both the general and disabled population. Unlike their peers, students with severe multiple disabilities require more training and adaptations to enjoy the ICT benefits.

**Aim:** This paper summarizes our experiences in enabling these students to use ICT in a special school and illustrates how ICT brings changes to them and facilitates their active participation.

**Methods:** To enable these students to use ICT, a structured program involving whole school, whole disciplines and whole day was developed. In essence, it comprised five elements: (1) a system to effectively mount the mobile device at a usable position; (2) customized adaptive mobile devices for learning and communication; (3) reliable and effective input method; (4) opportunities for intended learning in real context; and (5) continuity across the whole day and consistency between staff and parents. Three students with cerebral palsy (two spastic quadriplegia and one spastic diplegia; GMFCS Level IV-V), aged 7-19 years, with mild to moderate intellectual disabilities, were selected for illustration on how they learn to use ICT for communication, doing homework and facilitating community participation.

**Results:** Upon completion of the program, these three students showed obvious improvements in regards of participation in class, independency in searching information for home study, as well as community participation with detailed planning by navigating through on-line map, finding barrier-free facilities, communicating through apps and videoconferencing

**Conclusions:** A systematic and collaborative approach for training students with severe multiple disabilities to use ICT to surpass their severe and multiple limitations was demonstrated. With the help of ICT, these students enjoyed a greater sense of control and autonomy, thereby building up their confidence and belief in their power and becoming more active in learning and making decision for themselves.