

# SAHK

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**Introduction:** Conductive Education (CE) emphasizes nurturing active learning and self-determination. Flipped Classroom (FC) is an innovative pedagogy that enables learners to learn at their own pace and own progress by means of information and communication technology (ICT). In order to help students with multiple disabilities to cater their individual differences and diversified needs in learning and to take a more active role, FCs have been introduced in our special schools for teaching academic subjects.

**Aim:** This pilot project aims to evaluate the benefits and effectiveness of FC from the perspective of CE for students with multiple disabilities, using mathematics as an illustration.

**Materials and Methods:** Students in junior and senior secondary grades were targeted for the pilot. Instructional teaching and algorithms on mathematics topics are recorded into videos and uploaded to online platforms (e.g., YouTube, Office 365). Students were asked to acquire the contents through on-screen learning at home prior to face-to-face classroom teaching that were reserved for learning activities that consolidate and deepen understanding. Such activities ranged from collaborative peer learning, student presentations with ICT learning tools, and use of tablets to record and narrate the process of mathematics problem solving of individual students.

**Results:** It was found that students experienced more independence and faster progression than merely classroom teaching with increased initiation to prepare the lesson in advance. Students reported gaining autonomy, as they could choose to study at their own convenience and can learn repeatedly for difficult points. They also appreciated videotaping of their in-class learning process for later revision and self-evaluation.

**Discussion:** FC transformed teaching from teacher- to learner-centered. Teachers assumed the role as a learning facilitator rather than an instructor, leaving students to be more active, independent and responsible for their own learning. With this preliminary success, FC will be extended to other subjects e.g., Integrated Science, Chinese Language and General Studies.