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USE OF COMICS AND ALTERNATIVE ASSESSMENT IN A LOWER SECONDARY MATHEMATICS CLASSROOM

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Normal Technical students are generally more inclined to visual and kinaesthetic learning styles. However, more often, lessons are taught in an auditory learning style which results in them being disengaged (Chang, 1997). The question then arises, whether using a visual teaching style and an alternative assessment that focus on both a hands-on approach and group collaboration could lead to more engaged students.

We collaborated with the National Institute of Education (NIE) on the Mathematics is Great: I Can And Like (MAGICAL) Project. The project aims to engage students in learning mathematics through the use of comics. Our sample consisted of 39 Secondary One students (aged 12-13) in the Normal Technical stream. An alternative assessment was used to measure students understanding of the topic on Statistics after two weeks of teaching using the comic's package.

The alternative assessment consisted of three parts. Part 1 requires students to work in groups to design their own survey question and gather data from their classmates. Based on the responses they received, the data collected was then collated into a frequency table. Part 2 requires students to select a suitable statistical diagram to represent their data. Part 3 focuses on problem posing which provides students an opportunity to create their own questions based on their statistical diagrams from Part 2. In a nutshell, the assessment aimed to provide students the experience to craft their own survey question, represent and interpret data based on real-world contexts. Students were given an opportunity to engage in problem posing, a higher-order thinking skill which is an inseparable part of problem solving (Pólya, 1957).

The assessment criteria included clarity, organisation of content, depth of explanation and creativity. Students were also required to perform peer evaluation of their peers' contributions to their assessment. Overall, some groups of students were able to complete the assessment successfully. In the presentation, suggestions to improve the alternative assessment will be discussed.

References