Is It Merely A 'Drill'? A Lesson Learnt from Chinese Mathematics 'Drill Practice'

Jiqing Sun

Deakin University jiqing.sun@deakin.edu.au

Mathematics education in China is always perceived as 'drill practice' focused, which means students usually do an extensive amount of practice to master the content learned. In this sense, sometimes it is criticized as heavily 'procedural' orientated teaching and learning. However, when closely looking at these so-called 'drill-based' questions, it could be noticed many of them are well crafted to address students' conceptual understanding, flexible thinking, and reasoning. For instance, in algebra, many questions expose students to the structure flexibilities that are critical for mathematics learning at the senior level. Another example is that judging whether a statement or a procedure is correct or not is a very popular type of practice, which is supportive to the development of students' conceptual understanding. In this short communication, the presenter will show a range of examples of questions in the Chinese mathematics exercise book and discuss the rich pedagogical opportunities behind them, which might be directly applied to Australian secondary mathematics classrooms.