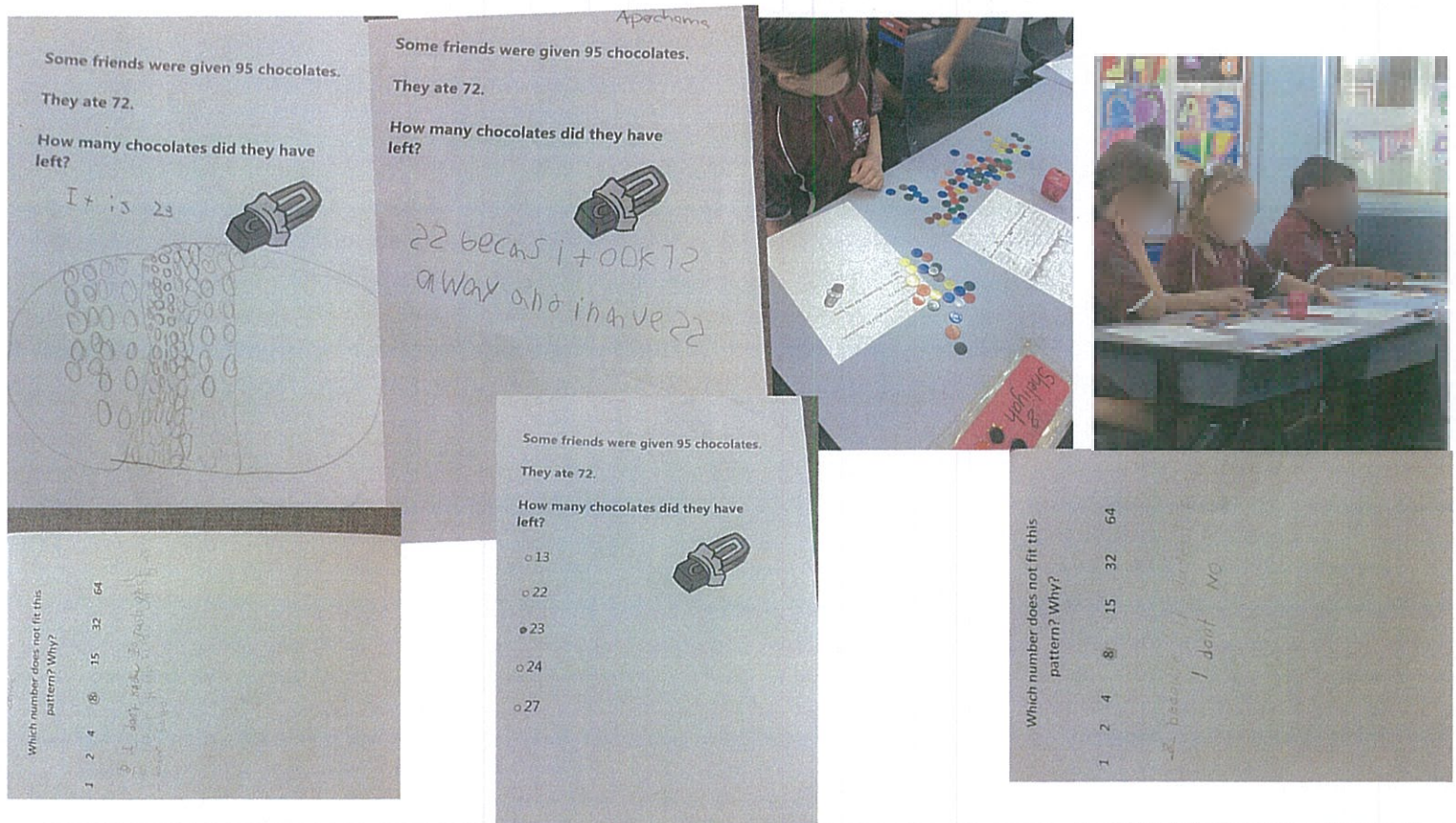


Does the appearance of multi-choice answers impact on students thinking and answers?

Introduction— Large scale testing such as PAT-M and NAPLAN often use multiple choice questions to test students' mathematical understandings. I wondered if students were given a PAT-M question without the multi-choice answers to solve and once they have solved the problem they were then shown the multi-choice answer would students change their answers or remain confident in their own answer.

Method— Students were given two PAT-M questions to solve without the multi-choice answer. Once students had come up with an answer to these problems they were then given the multi-choice answers to the questions. Students then decided to select their original answer or switch to another answer.

Observation— I observed that when students had questions without multi-choice answers they spent longer working out the answer and wanted to use manipulates such as counters to assist them with working out the answer. Students spent less time on questions when the multi-choice answer was present after they had solved the answer once.



Discussion— My original thoughts was that when students were confident with their answers and had strong reasoning behind their answer they remained true to their answer after they had the multi-choice answers. If students were not confident and had no reasoning behind their original answer they were more likely to change to another answer.