Abstract

‘Reading to learn mathematics’ has diverse interpretations: from reading to decoding text to reading mathematical literature. This blind study examined the impact of enhanced reading of the mathematics textbook in a Pre-Calculus 11 classroom. Students read and made personal notes on new content before there was any discussion or direct instruction. Their work was collected and examined for aspects and features of the mathematical text noted and whether work was directly copied or uniquely created. Prompts such as, ‘Create notes for a friend who missed class’ were used. The voice of their written work was compared to the voice of the textbook. Results indicated it was not the correctness of explanations or interpretations that mattered, rather the personal involvement with text that allowed for understanding. Further, students demonstrated increased ‘why’ questions, a broader use of mathematical register during class discussion, and changes to their personal connection to their learning.

Key words: mathematics textbook, reading, addressivity of voice, personal student note-making, mathematical literacy, classroom communication