

Animated e-books can help lift language skills: Study

Parents may fret over their children having too much screen time but reading electronic books, also known as e-books, has its benefits.

A recent study of 102 pre-schoolers in Singapore found that animated e-stories, those with motion and sound, can help improve their language proficiency.

Dr Sun He, principal investigator for the National Institute of Education (NIE) study, said e-books can be a learning tool for children, especially those who are weaker in their mother tongue language.

Her research was published in April this year in the American Educational Research Association Open academic journal.

Dr Sun said: "Children already have screen exposure, the question is how to make better use of the time they spend on tablets and if there can be any value."

But she cautioned that the right types of e-books should be used – advice backed up by her research.

As part of the study, the children aged four to five years were split into four categories.

The first group was given animated e-books with sound and motion, the second had e-books with sound but no motion, and those in the third category were given e-books with just static images.

The last group was a control condition, in which children played a mathematics game on an iPad.

The children were shown three stories in Chinese on a laptop four times over a period of two weeks,

while an eye tracker was used to trace their eye movement.

They were then given a series of tasks to test their knowledge of certain words in the stories, as well as their ability to retell the stories and understand meaning.

The results showed that children in the first category, who had sound and motion in their stories, outperformed their peers in the other groups.

They had longer attention spans, could use new words in the correct context and were better able to retell complicated stories.

Dr Sun said these findings highlight the importance of having motion in storytelling as it directs children to details and helps them retain information better, particularly for those who are weaker in a certain language.

"So if a child's language is already good, paper books might be good enough but additional cues such as movement would benefit a child whose language proficiency is weaker," she said.

"Motion may not only facilitate better acquisition of verbs but also adjectives. In terms of story retelling, motion may promote the memory of complicated story plots."

Amelia Teng

IMPROVING SCREEN TIME

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