

Vocab learning gets virtual makeover



UNIVERSITI Putra Malaysia (UPM) researchers have created an English language enrichment game set based on augmented reality (AR) and virtual reality (VR).

The innovative learning method, based on edutainment and called E-Language Exploration 2020, is targeted at Years One and Two pupils, as well as those with learning difficulties.

UPM Modern Languages and Communication Faculty senior lecturer Dr Ilyana Jalaluddin said the purpose of this game and the research that led to it is to “change the learning scenario for the English language, namely, for low-achieving pupils and those with learning difficulties”.

The exploration-based language programme focuses on vocabulary, including conjunctions and nouns learnt in the syllabus, while at the same time develops critical thinking skills.

She said it is not easy for pupils to learn English as a second language, especially those who are low-achieving or with learning difficulties.

“These pupils need more learning aids than usual to enable them to learn in an interesting and effective environment,” she said in a press release from the university on Aug 3.

The interactive elements in the enrichment game, she added, are supported by an AR and VR application called Hunting with E-Language to encourage critical thinking skills.

Ilyana, who is also the lead researcher for the project, said most learning aids available now

are based on traditional methods.

“Relying solely on these learning materials alone is not enough as pupils get bored easily and may find it difficult to understand the concept of the words,” she added.

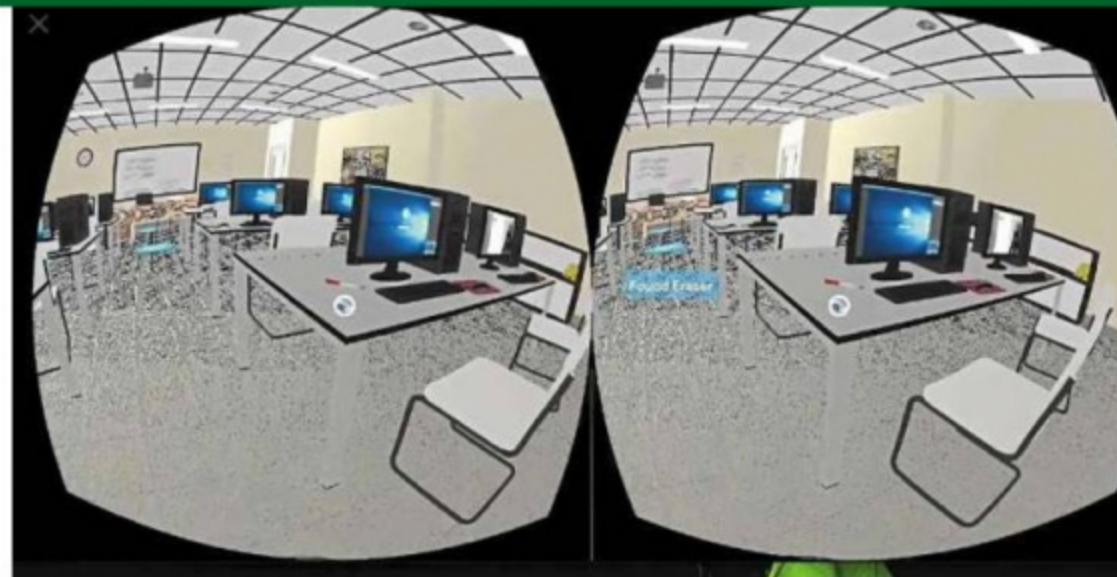
Thus, she said, incorporating digital elements would make the lessons more exciting for these pupils.

Ilyana added that learning using technology for pupils with special needs is rarely carried out due to the lack of specific applications or software meant for them.

She said the reason the researchers chose to develop the game to meet the learning needs of primary school pupils was that the basics of literacy begin at this level.

It is also easy to detect pupils who are weak at learning languages, especially English, at this stage, she added.

“The creation and implementation of AR elements enriches the textbook, making it more interac-



Edutainment: A screenshot of the VR game in which pupils are required to find an eraser in a virtual room.

tive to facilitate the learning process of these pupils in understanding the vocabulary and finally being able to use the words in their learning,” she said.

She added that AR is currently used in storybooks and the teaching of science and mathematics but rarely used in learning languages.

“Through this E-Language Exploration 2020 series, pupils not only can see vocabulary come

to life, but are also able to use and explore the vocabulary via VR,” she added.

Apart from Ilyana, UPM Modern Languages and Communication Faculty senior lecturer Dr Ramiza Darmi and Educational Studies Faculty senior lecturer Dr Lilliati Ismail made up the research team.

The research was carried out from Feb 1, 2018 to April 30, 2021.