



‘AReal-Vocab’ : The New À La Mode of English Vocabulary Learning for Children with Autism

Group member

 PRODUCT
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SIGNIFICANCES

Autism learners can learn English vocabulary in a more interesting yet meaningful manner

Sparks their interest in their English vocabulary language learning process

Practical, cost-effective, user-friendly & transferable to other practitioners

Can benefit learners with autism, teachers & parents with autism children

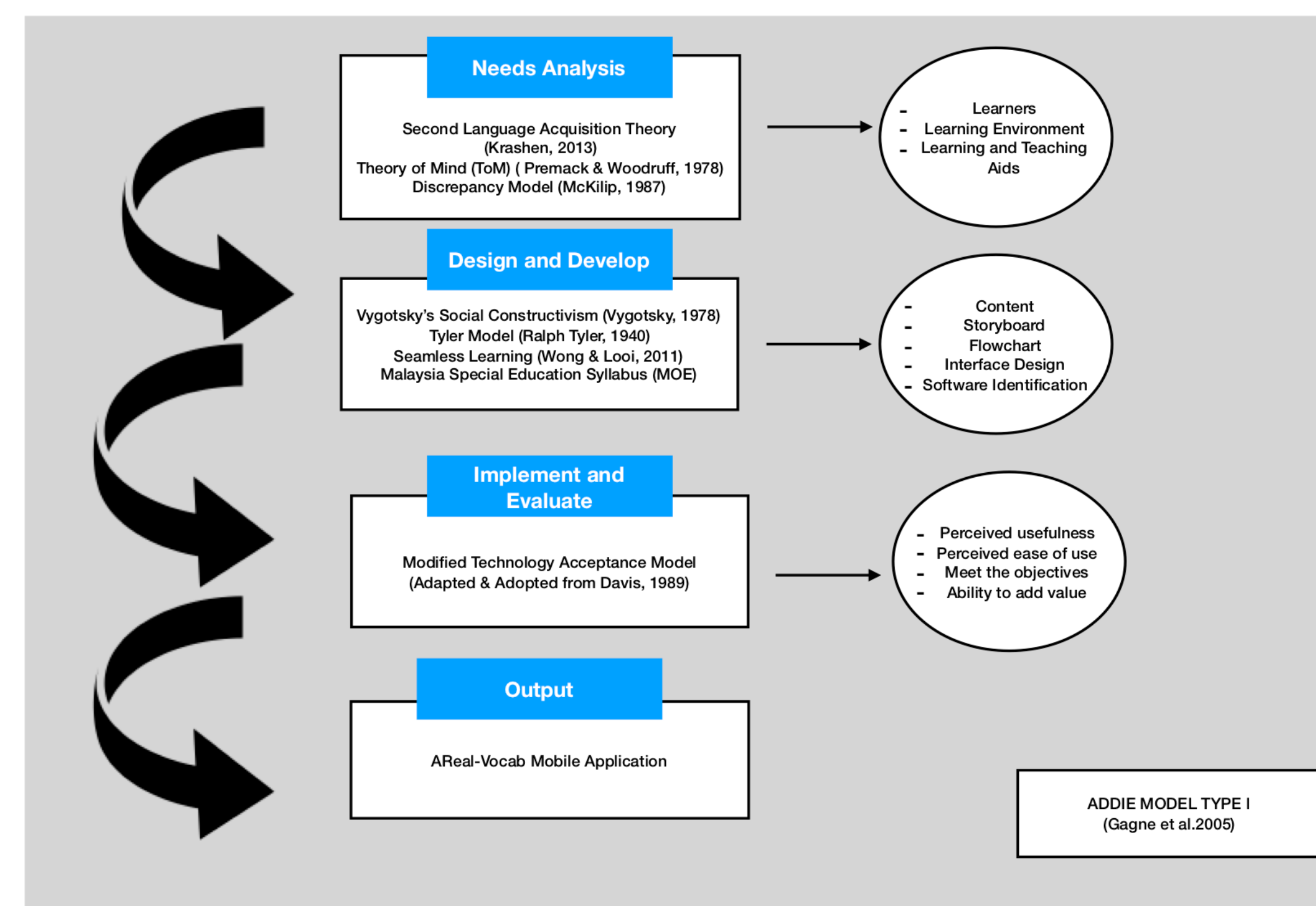
ABSTRACT

Autism spectrum disorder is a neurological disorder due to which diagnosed child may face difficulty in social communication or have a repeated or restricted set of behaviours. Learners with autism are mostly visual strategy learners and they tend to learn better through pictures and images. Due to their cognitive disabilities, most learners with autism struggle to acquire new vocabulary and the use of technology has been making its waves since 2012 and no longer a stranger to the Autism education world. Hence, this innovation involves the use of augmented reality technology in developing a mobile augmented reality application named ‘AReal-Vocab’ to help learners with autism with their English vocabulary learning process. The developed mobile augmented reality application is employed to two autism learner aged 7 to 10 years old to discover their acceptance towards the developed mobile application. Based on the findings, it can be seen that AReal-Vocab can act as an assistive technology for autism learners to learn English vocabulary in a more interesting yet meaningful manner and at the same time spark their interest in their English vocabulary language learning process.

INTRODUCTION

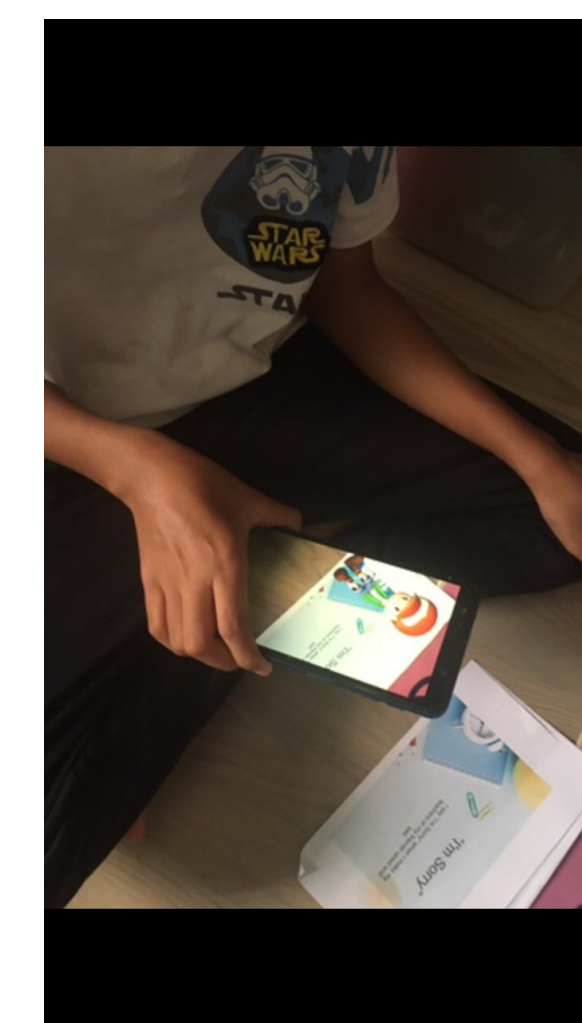
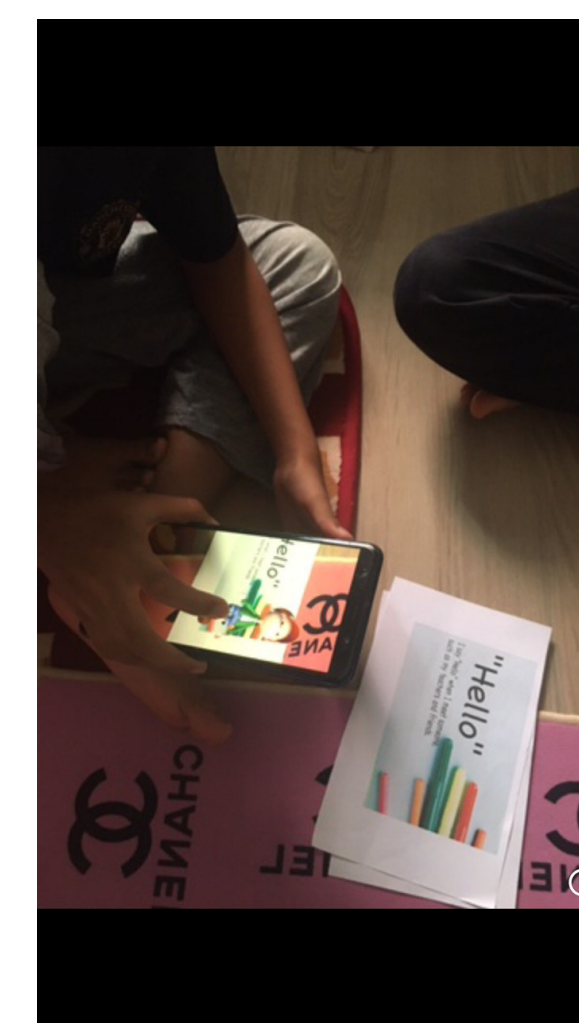
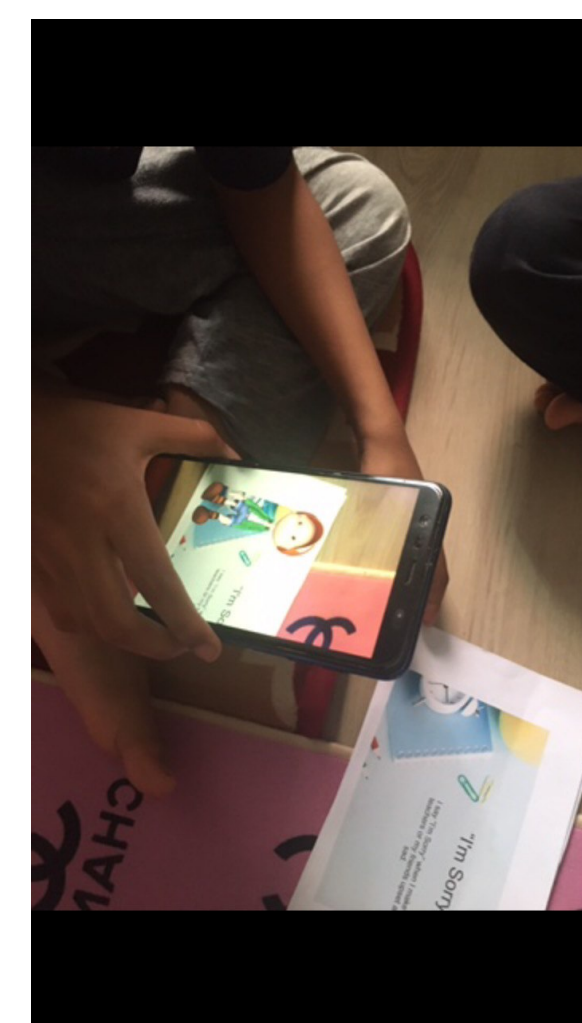
Learning can be a very challenging process for children with autism at their early childhood phase due to their cognitive disability (Lord, Brugha, Charman, Cusack, Dumas, Frazier & Taylor 2020). As children with autism are mostly visual learners (Nizam 2019), one of the best ways they can learn best is via images and pictures. The use of augmented reality technology is considered in this innovation as past literature has proven that augmented reality technology could help to provide autism learners with a more meaningful learning session, (Marín-Díaz, 2016; I-Jui Lee, 2020; ElSayed, 2020). Hence, this innovation is invented and a mobile augmented reality application Prototype named ‘AReal-Vocab’ is designed and developed to help learners with autism in their English vocabulary language learning journey.

METHODOLOGY



PRODUCT DESCRIPTION/ INNOVATION IN BRIEF

The product innovation involves the design and development of a mobile application that involves the intervention of an Augmented Reality Technology to help children with Autism to learn English vocabulary accordingly but in a more interesting & meaningful manner. The mobile application named “AReal-Vocab” is meant for autism children to have their English Vocabulary learning process leisurely at their own convenience. The mobile application is to be considered as practical, interactive, convenient and user-friendly.



SHARIAH COMPLIANCES

This mobile application of AReal-Vocab is free to be used by all educators, autism learners and even parents with autistic children. Users only need to install and download the application from Google Playstore or App Store for free and scan the flashcards that come along with it.

“LEADING INNOVATION”

NOVELTY/ ORIGINALITY

1. Able to turn the traditional two-dimensional learning into a three-dimensional, interactive, and engaging learning experience

2. Enticing to a wide range of learners with different learning styles

3. It conveys a friendly message, and the way the character communicates through movement also conveys a straightforward message that is simple to understand

4. The 3D character has a distinct and vibrant appearance that will have a greater influence on the children towards understanding the meaning of the text

AWARDS :: PUBLICATION :: PATTERNS

3 GOLD AWARDS IN INNOVATION COMPETITION
1 SILVER AWARD IN INNOVATION COMPETITION
1 PUBLICATION AND 1 PUBLICATION IN-PRESS IN WOS-INDEXED JOURNAL

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