

# The Needs Assessment for the Development of Mobile Application Based on Scaffolded Reading Experiences and Gamification for Enhancing Digital Reading Literacy of Lower Secondary School Students

## Objectives

1. investigate the need for developing a mobile application based on scaffolded reading experiences and gamification to enhance the digital reading literacy of lower secondary school students
2. explore the students' current and desired states of digital reading literacy competencies at the lower secondary level

## Sample Size

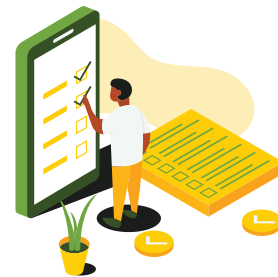
646 lower secondary students selected through multi-stage sampling



## Research Instrument

A questionnaire with a reliability coefficient of 0.903. The questionnaire included 3 sections:

1. Demographic information
2. Learning needs regarding the use of mobile applications
3. Digital reading literacy requirements



## Analytical Methods

- > Descriptive statistics
- > The Modified Priority Needs Index ( $PNI_{Modified}$ )



## Findings Revealed

The top priorities in each domain of learning management to enhance digital reading literacy as follows:

### Mobile application



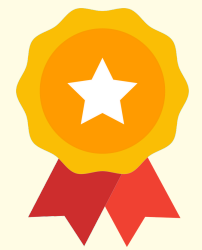
Sharing via social media apps  
( $PNI_{Modified} = 0.27$ )

### Scaffolded reading experiences



Highlighting while reading on apps  
( $PNI_{Modified} = 0.42$ )

### Gamification



Collecting reward badges on apps  
( $PNI_{Modified} = 0.39$ )

Regarding digital reading literacy competencies, the top three essential needs identified were:

1

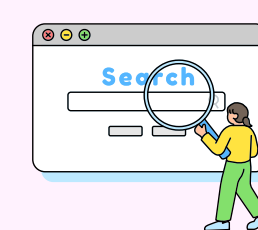
Explaining and interpreting main ideas in context



( $PNI_{Modified} = 0.25$ )

2

Searching with appropriate keywords online



( $PNI_{Modified} = 0.20$ )

3

Identifying main ideas with logical evidence



( $PNI_{Modified} = 0.19$ )