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Cawangan Kedah  
Kampus Sungai Petani

Faculty of Administrative  
Science and Policy Studies

# i-SPIKE 2021

*Leading An Artificial Innovation In Knowledge, Education And Design*

## **i-SPIKE 2021 INTERNATIONAL EXHIBITION & SYMPOSIUM E-PROCEEDINGS**

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## INQUIRY-BASED RECIPROCAL TEACHING MODULE

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### ABSTRACT

Inquiry-Based Reciprocal Teaching (I-RT) Module was developed to provide Malaysian ESL educators with appropriate reading comprehension lessons to enhance the reading comprehension skills of Malaysian upper secondary ESL learners. With systematic guidance through embedded ADDIE instructional framework in Design and Development Research (DDR), and close reference to the Standard-Based English Language Curriculum for Secondary Schools (SBELC), this module weaved the four reciprocal teaching strategies: predicting, clarifying, questioning and summarizing, into the five cycles of inquiry-based reading: engagement, exploration, explanation, elaboration and evaluation. Designed to complement and ease the implementation of reading comprehension instruction, suggested reading lessons in this module were organized around classroom settings and can be applied to suit the differing needs of the learners. Adhering to the four language domains in SBELC namely personal, public, educational and occupational, this eight-unit module bases its reading activities on the four themes in SBELC: people and culture, health and environment, science and technology, and consumerism and financial awareness. The suggested lesson plans, teaching notes, worksheets and self-assessments allow the educators and learners to scaffold and construct meaning in a social setting through modelling, think-aloud and discussion, thus resulting in active learner engagement in the process of reading comprehension. With three recent publications and good content validity, this module serves as an authentic well-presented reading supplementary module which features well-thought strategies and activities to enhance learners' reading comprehension.

**Keywords:** reading comprehension, module, reciprocal teaching, inquiry-based reading, ESL learners

### INTRODUCTION

Designed to complement the revised curriculum and Common European Framework of Reference for Languages (CEFR), Inquiry-Based Reciprocal Teaching (I-RT) Module includes the content standards, learning standards and performance standards for Form Four reading syllabus in the Standard-Based English Language Curriculum for Secondary Schools (SBELC). Weaving Palincsar and Brown's (1984) Reciprocal Teaching into Bybee et al.'s (2006) BSCS 5E model, this module integrates four reading comprehension strategies namely, predicting, clarifying, questioning and summarizing into the five stages of inquiry-based learning cycle: engagement, exploration, explanation, elaboration and evaluation. The embedded ADDIE instructional framework in Design and Development Research (DDR) guided the process of module development systematically.

## PROBLEM STATEMENT

In the fast-moving global era of the 21<sup>st</sup> century, the current Malaysian ESL learners need to equip themselves not only with diverse knowledge and competencies but also language proficiency in line with international standards as proficient English language users have better opportunities over the others, thus the great emphasis on the English language. However, despite the given concern to this transformation, the problems with reading comprehension continue to plague our students (Hazita, 2016; UNESCO, 2017) and schools. Teachers are concerned about their students' lack of reading comprehension skills as many students are able to decode the text fluently but fail to comprehend it (Hiew, 2012; Raihana et al., 2018). This impedes the production of independent and proficient readers (Wanzek et al., 2018).

In recent years, with mean reading scores of Malaysian 15 years-old learners in Program for International Students Assessment (PISA) at 398 in 2012 (OECD, 2012) and 415 in 2019 (OECD, 2019), this alarming low reading proficiency placed Malaysian ESL learners below the Organization for Economic Cooperation and Development (OECD) average reading scores. The low reading proficiency of Malaysian learners were also evident in the results of the 2017 Assessment of Literacy Competence in Reading. It was revealed that the mean score for reading literacy was at 416.4. In 2017, out of the total of 406,311 students from 2,046 schools in Malaysia, 36.6% or 148,751 students were low achievers in English Language Reading. Table 1.1 shows the detailed results of the assessment.

**Table 1.1: Results of the Assessment on Literacy Competence in Reading,**

High ( $X \geq 500$ )	Medium ( $400 \leq X < 500$ )	Low ( $X < 400$ )	Total Students
78,517 (19.3%)	179,043 (44.1%)	148,751 (36.6%)	406,311

Source: Annual Report, Ministry of Education Malaysia, 2017.

A valid starting point to rectify these predicaments would be to ensure that teachers be exposed to specifically target explicit comprehension instruction and modelling as well as to receive supports in implementing it. Hence, this module aims to provide ideas for teachers to incorporate rich and varied scaffolds and to actively engage students in employing reciprocal teaching strategies into their inquiry-based reading activities.

## MODULE CONTENT

Inquiry-Based Reciprocal Teaching Module aims to provide foundational ideas of reciprocal teaching strategies and BSCS 5E model by outlining the implementation of reciprocal teaching strategies in inquiry-based reading activities. It allows teachers and students to scaffold and construct meaning in a social setting through modelling, think-aloud and discussion, thus resulting in active engagement of the students in the process of reading comprehension.

The objectives of this module are to:

- improve students' reading comprehension using four comprehension strategies (predicting, clarifying, questioning and summarizing)
- guide students to become critical and reflective in their strategy use through the use of five stages of learning cycle (engagement, exploration, explanation, elaboration and evaluation)



- scaffold the four comprehension strategies by modelling, guiding and applying the strategies in a variety of texts
- provide opportunities to the students to use the social nature of learning and encourage collaborative efforts to improve and scaffold reading comprehension

This module contains eight units, each of which includes strategies and activities based on the four themes in SBELC: (i) People and Culture, (ii) Health and Environment, (iii) Science and Technology, and (iv) Consumerism and Financial Awareness. Suggested reading activities in this module also provide the content for language use in adherence to the four domains in SBELC: Personal, Public, Educational and Occupational.

The ten units in this module are divided in the following manner:

- Getting Started: Introduction to Reciprocal Teaching and BSCS 5E model
- Unit 1 – 4: Reciprocal Teaching Strategies – Predicting, Clarifying, Questioning and Summarizing
- Unit 5 – 8: Modelling Reciprocal Teaching Strategies in different types of text - narrative, expository, descriptive, and argumentative.

Getting Started sets the foundational ideas to help teachers begin using reciprocal teaching and BSCS 5E model in their reading classes. It covers the rationale and essential understanding central to the merging of reciprocal teaching and BSCS 5E model. It also provides the staggering results that reciprocal teaching and BSCS 5E model can deliver.

Unit One to Four discuss in detail each of the four strategies: predicting, clarifying, questioning and summarizing. Suggestions for reading activities that incorporate reciprocal teaching into inquiry-based reading classes that incorporates the five stages of learning cycle are outlined. However, it should be highlighted that the strategies in reciprocal teaching should be taught in concert with one another. The focus on only one strategy in these four units is just a preparation for the students to know how the strategy fits back into the larger framework.

Unit Five to Eight offer detailed accounts of the incorporation of reciprocal teaching lessons in inquiry-based reading classes. The lesson plans outline the modelling and scaffolding of the use of the four strategies in different genres. Interesting and challenging activities through a variety of texts assist students in remembering and internalizing reciprocal teaching strategies for eventual independent use.

Each unit in Inquiry-Based Reciprocal Teaching Module comprises:

- Unit Preview: This section serves as an introduction to the unit. It includes the objectives and overall features of the unit.
- Teaching Manual: This section incorporates suggested lesson plans for the modelling and scaffolding of each strategy follow a similar format:

Background	➤ Brief description on the lessons
Content Standards:	➤ Specific statements of educational goals
Learning Standards:	➤ Concise educational objectives
Learning Outcomes	➤ Behavioral outcomes
Procedures	➤ 5E: Engage, Explore, Explain, Elaborate, Evaluate
Activities	➤ Focuses on the 21 <sup>st</sup> century learning activities
Other Elements	➤ Language and Grammar Focus

	<ul style="list-style-type: none"> <li>➤ Cross-Curricular Elements</li> <li>➤ Differentiation Strategies</li> <li>➤ Moral Values</li> </ul>
Materials / Reference	➤ Supplies needed for the lesson
Reflection	➤ Post-lesson reflection of understanding

- Reading Activities and Worksheets: This section enables the practice of various techniques for the suggested reading comprehension strategy.
- Self-Assessment: This section provides evaluation and feedback on the strategies learned.

This module is therefore suitable for students of English as a second language working at Common European Framework of Reference (CEFR) level A1 and A2 (Basic User) towards B1 and B2 (Independent User). They will benefit from this module as cognitive and metacognitive reading activities in this module will guide them on the strategies that efficient and fluent readers use to comprehend different types of texts. The activities in this module are organized around classroom settings and can be applied in any order to suit the needs of the students and teaching style. It is therefore advisable to use this module in a progressive manner.

## IMPACTS

This module contributes to the body of knowledge through the employment of the meticulous steps in creating a module content that adheres to the curriculum specification and the learners' needs. The vast content of reading texts is parallel with the CEFR levels stipulated in the curriculum, hence, facilitated their learning. The elaborated and illustrated details in the module served as a guideline for future researchers to develop a similar module on reading strategies and reading activities.

The process of establishing the validity and reliability of Inquiry-Based Reciprocal Teaching Module for the quasi-experimental procedure also indicated that this module can be utilized as teaching guideline by ESL teachers, thus eliminating the time and resource constraints faced by the teachers in preparing lesson plans for their students. This is due to the reason that some of the reading texts in this module were taken from the designated Form Four textbook. Therefore, Form Four ESL educators can use this module at ease with the lesson plans, notes and worksheets prepared for them.

The self-assessments at the end of each unit in the Inquiry-Based Reciprocal Teaching Module can serve as self-evaluation to evaluate learners' reading comprehension performance. The retrieved evaluation from the self-assessment provides the ESL teachers with accurate information in the identification of potential and struggling readers, thus assists the teachers in planning for future lessons.

Furthermore, the merging of reciprocal teaching strategies and 5E model for the purpose of comprehension-fostering and comprehension-monitoring activities in classroom resulted in the disclosure of reading outcomes and perceptual change in the ESL students. This module could therefore assist the teachers in gaining some insights on how to retain learners' attentiveness in reading comprehension classrooms. The teachers then can strategize and make informed decisions on the appropriate instructional strategies to be practiced during their reading comprehension lessons.

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