

# Evaluating Reading Laboratories for Students of English in a Malaysian Secondary School Context

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**Abstract:** Specifically designed materials to promote reading, so called 'Reading Laboratories' have been used since their inception over 60 years ago in both primary and secondary school by first language learners. This research investigates the suitability of the materials for second language learners, namely those of secondary students of English in a Malaysian school context. A total of 328 students aged 13 to 15 years were involved in a trial of the Australian *Reading Comprehension Box* produced by R.I.C. Publications during March 2013. An action research approach was taken with a mixed method for the data collection (classroom observations, teacher reflections, student interviews and surveys). The findings indicated overwhelming support of the materials by both teachers and students. They are presented here to share the lessons learnt and raise awareness amongst educators of the potential benefits and shortcomings that such repurposing of learning tools holds.

**Keywords:** Reading skills, reading materials, Malaysian context

## INTRODUCTION

In the 1950, a reading program (specifically designed materials by an educator for his 32 students) started in Florida, USA. The materials consisted of colour-coded portions (mostly cards) of reading materials (such as short essays, facts, stories, poems) with increasing levels of

difficulty in terms of reading ability levels. Such boxes or 'Reading Laboratories' were published commercially in 1957 and spread rapidly into classrooms. Their popularity was based on the learners being able to direct their own learning. Specifically, learners worked independently through the materials, taking responsibility for their own learning in terms of pacing, tracking and assessing their progress as they work their way up through the various levels. This allowed learners to progress at their own rate, fostered autonomy and in turn independent, confident learners (SRA Reading Laboratories, 2012).

Reading Laboratories are produced for first language learners, namely native English speaker students in primary and secondary schools, which are usually between 4 and 17 years old. However, the author postulated that English Second Language (ESL) learners may also benefit from the materials and the research project presented here aimed to investigate the repurposing of this potential resource in a Malaysian secondary school context.

The encouraging results of the pilot project describes in this paper led to a nationwide roll-out of the reading materials for all secondary schools that are part of the network. Educators in these schools are currently using the new resource with their students and it is hoped that further research will be undertaken to investigate the long term effects of the extensive reading periods on the English language proficiencies of the participating secondary students.

## **BACKGROUND INFORMATION**

There are several commercial providers of Reading Laboratories, such as Science Research Associates (SRA), which has developed materials for learners from kindergarten (aged 4 years) to Grade 12 (aged 17 years) and beyond. SRA Early Interventions for example is specifically designed to help learners with reading difficulties in their first couple of years of schooling. The materials contain a

teacher's handbook, students' record sheets to keep track of their learning and cards that are colour-coded according to reading level. Reading focuses on phonics, fluency and reading comprehension with 120 lessons daily lessons of 40 minutes each in which small groups of struggling learners who receive supplementary practice under the guidance of a teacher. While students are provided with clear objectives that are embedded within activities that they are ready for and thus have experience a successful, safe and motivating experiences, there are also disadvantages such as the ineffectiveness of materials in identifying learners with reading difficulties and the required specialist teacher training, which is time consuming and costly (Dial, 2012).

The American McGraw Hill Companies (2013) who promotes and sells *Reading Boxes* (a set of four in yellow, green, blue and red) claims that the materials are highly motivational, appeal to reluctant readers, are suitable for use in all classrooms, help learners make rapid progress in their reading, significantly improve comprehension skills and are easy to manage since they were specifically designed to close the learners' gap between their decoding skills and comprehension ability. It is asserted that the boxes teach learners to understand texts by inferring, deducting and looking for meaning beyond the literal; support reading for information as learners scan texts, skim for gist and overall impression while obtaining specific data through detailed reading; and familiarise learners with language used in instruction, explanation, description, reason, persuasion and argument.

The Australian R.I.C. Publications *Comprehension Box Set* is a series of three boxes (red, green and blue), each with one teacher guide, 150 comprehension cards and 150 answer cards. Box 1 is red with the least difficult texts suitable for English native speakers of ages 5 – 7. Box 2 is green and sits between the other two boxes in terms of the texts' difficulty and is suitable for English native speakers of ages 8 – 10. Box 3 is blue with the most difficult texts, suitable for native speakers of English at an age of 11 years or older. The materials feature fiction and on-fiction texts

and vary in difficulty depending on the topic, conceptual understanding required, age appropriateness, included artwork, number of words, number of questions, complexity and length of sentences, difficulty of vocabulary as well as the grammatical complexity in terms of passive or active verbs (R.I.C., 2013).

Teachers4Teachers, an Australian Publication company offers *The Reading Box*, which is a set of four boxes (yellow suitable for Ages 5.6 to 11; blue suitable for Ages 6 to 12, red suitable for ages 7 to 13.9 and green suitable for ages 8 to 15.5 that allow for totally individualised learning. It is claimed that the materials offer informative, imaginative and motivational texts as well as ask literal, interpretive, inferential and critical questions. Text types include poems, comics, discussions, explanations, recounts, visual texts, expositions, procedures, descriptions, reports and narratives. The reading boxes contain a simple test to start students and progress charts, a teacher's manual and folder and laminated cards. (Teachers4Teachers Publications Pty Ltd, 2012).

The Australian Macmillan Publishers (2013) produces a set of four boxes with eight books for each reading level called the *Reading Bug Box*. The books are designed for junior primary students (aged 5 to 8 years). At reading level 1-8 and 9-16 there are 64 books each, with reading levels 17-23 and levels 24-30 containing 56 books. The books contain fact and fiction (fantasy, reality, recount, procedures) and are intended to be taken home to ensure that all students have a book to read each night. There is an accompanying worksheet for each title exercises to reinforce literacy skills, a take-home sheet for parents to sign after each book has been read and a certificate of completion (Macmillan, 2012).

In summary, the various reading materials may assist learners to improve their reading skills by developing comprehension, vocabulary, fluency, word analysis. They have the capacity to boost reading confidence through manageable tasks that foster motivations as well as improve spelling. Teachers can set up small groups of learners to work independently with the materials while being engaged

in other activities with the remaining students. However, the scripted approach and too much reading materials might become boring and the initial setting up is time intensive if used exclusively. There seems to be value in using the above reading materials for intervention (specifically with students who show low reading proficiency) or with mixed abilities classes as students can work independently with materials appropriate to their reading level and monitor their own progress with the provided tracking sheets. Teachers might be able to target struggling students and use the reading materials as intensive intervention. Initial consideration and inspection of the materials suggested, that there seemed to be a place in the Malaysian ESL secondary school classroom for this resource. Hence, the described trial was conducted to gain insights on the acceptance of the materials by teachers and students as well as their usefulness, engagement and enjoyment level.

## **METHODOLOGY**

One set of *The Reading Comprehension Box by R.I.C. Publications* was obtained to determine if first and foremost those materials designed for English native speakers were suitable for ESL learners, especially those in a secondary school context in Malaysia. To determine the optimum use of the materials and to gain the greatest benefit for the learners, the second goal of matching each of the three boxes to the English proficiency of the learners which were spread across secondary school. Hence, a number of approaches were employed to seek the broadest possible range of experiences and feedback. The assessment of the materials used an action research approach reminiscent of Paulo Freire's 1982 work on adult education research. Subsequently, Participatory Action Research (PAR) has evolved over the last few years as a significant methodology for intervention, development and change within groups and communities as a response to traditional models of education where the teacher gives information to passively receiving students.

The PAR process uses inquiry and action to address issues that affect those who participate as co-researchers. The key idea here is that research is done 'with' people and not 'on' or 'for' people (Reason & Bradbury, 2008).

Chevalier and Buckles (2013) pointed out that PAR users aim to integrate three components: participation, action and research. This gives participants a democratic voice within their community, engages them with experiences and employs thought and the growth of knowledge. PAR fitted the aims of the project perfectly while also introducing the community of learners and educators to an approach that was previously unknown. For the former, it was seen as an empowerment as it democratizes knowledge making; for the latter the focus was on the process as a professional development activity.

## **Participants and Data Collection**

During March 2013, a total of 328 students and six teachers across 12 classes in Form 1 to Form 3 (13 to 1 year olds) in a Malaysian secondary school took part in the trial of the materials. The participants were briefed on the reasons for the trial. At the end of the class, they were asked to fill out a short survey about the materials. Students' comments were gathered verbally and from the written survey comment section. For reasons of authenticity, comments were included verbatim in this paper. The data collection took place over 22 teaching periods (each of 35 minutes length). It consisted of classroom observations, teachers' feedback, student interviews and student surveys. Some classes were given the opportunity to use the materials on more than one occasion. Surveys were distributed to each class after they completed their involvement with the reading comprehension boxes, yielding a total of 207 student surveys.

## **DISCUSSION**

The actual implementation and evaluation of the materials during this trial period uncovered some pragmatic issues

such as the sturdiness and weight of the boxes. Carrying one box into the classroom was heavy and two boxes were almost impossible, especially up and down stairs. Permanent storage of the boxes in one classroom would overcome this issue although this would limit access to the resource by other classes and their teachers. After a week of moving the boxes across the 12 different classes and using them by more than 300 students, the boxes and cards showed wear and tear despite carefully handling. Another problematic issue related to the tidy condition and full set of the cards to ensure that all are kept together and in the intended order, which required regular checking and straightening out.

A major shortcoming was the shortage of student tracking sheets, which was only sufficient for one set of student (30 pieces). Photocopying or the recording of answers onto a separate piece of paper would provide a workable solution.

Nevertheless, the overwhelming majority of students rated the materials favourable in the survey, as the summary table below indicates:

**Figure 1**  
Total survey results of 207 students

Question	Please tick the box that represents your opinion	Yes	Not sure	No
1	I enjoyed using the cards from the box	201	24	0
2	I understood the questions and answers	130	72	4
3	I learned more English from the cards in the box	202	4	1
4	I would like to use the cards and the box again	193	13	1
5	I think the school should buy the cards and the box	175	22	10

Some of the students' comments related to the level of difficulty of the materials and their verbatim comments

are repeated here (inclusive of grammatical and spelling mistakes) for authenticity.

Some student comments were “I will change the card language into dual language. So I will understand questions”, which indicates a desire for bilingual cards. While this is neither financially viable due to a very small market, it is also educationally not desirable as students may only read the text in their first language for convenience sake. “I would like to change the long words to be like a picture or chant” and “I want the question not be very hard to answer it” seems to indicate some unfamiliar vocabulary, which hinders comprehension and enjoyment of the read text. In order to overcome this, students could be encouraged to use dictionaries in order to look up words.

One student indicated that “I love to do the cards in the red box because it is easy but the green and the blue box too difficult for me” and “I like green much [more] than blue. The story in blue box makes me dizzy.” These comments show reflection on behalf of the students and a capacity to self-assess their English proficiency and reading ability.

There were students who thought the materials too challenging “I want the question not be very hard to answer it” and “Avoid using too many advanced English word because student can’t understand the text” and those who thought them to be too easy “I would try to make harder questions”. Yet another student commented “The questions so hard and unpredictable”, while yet another student wrote down this remark on the survey form “I really love it...really...really... really love it...I would like to use it again”.

Another student commented “I want decorate the cards”, indicating a desire for some drawing or writing activity. Other comments included “Some definition for some words”, “Bold the new words”, “It perfect for pupils who low in English”, “Not easy, not hard”, “It helped me in understanding the comprehension”, “Its good because there are lots of words I don’t know”, “Many stories. It is excellent.” Again, the use of a dictionary might overcome these issues. More importantly is the observation that learners were critically thinking about the value of the materials for them, thus being engaged in the action research process while also using their soft skills.

One student preferred new and emerging technologies, stating “I think it much better if we use computer to learn English than this card in the box.” This comment really stood out as the learner thought well beyond the range of other learners’ responses.

In summary, the learners’ responses reflected their English reading ability and thus their capacity to read the various cards. By pitching the boxes to the classes in terms of appropriate level, the number and extent of negative comments will be reduced in favour of a more suitable match between the difficulty of the reading material and the learners’ reading ability.

The teachers also used some of the cards to familiarize themselves with the materials. During this exercise one teacher found an error on a card (Turquoise 7, Question 10). Another teacher found some ambiguity in the answers of a card (Bronze 10, question 3 and 7). It is felt that questions and answers need to be very clear to avoid confusing the students. Despite this, the teachers rated the cards and box as attractive, the tracking of students’ progress as valuable and the task of reading and answering related questions as aligned to their assessments.

## **LIMITATIONS**

The materials were on loan for a trial period, which presented the research with a time limitation. Hence, the boxes could only be tested for the duration of a week and no long term impact was able to be studied. Furthermore, the boxes were only tested in the individual classrooms during scheduled lessons and not in a central location such as the library where student could self-access them during their free time (for example recess, lunch or study periods). It would be useful to trial the boxes in a focal location such as the library and have them stationed there permanently to establish whether this approach is more advantageous than carrying the boxes for each teaching periods into another classroom. Also, boxes were only used only as a whole class activity and not with small groups or individual students. Due to the

short time frame, it was not possible to test the materials as an extension activity for high performing students or as a support mechanism and engagement tool for struggling students. An extended trial period would allow identifying those students and targeting them for specific use of the box to enhance their English comprehension skills. It is anticipated that this will improve the students' enjoyment of and capacity in using the English language. In addition, the reading materials may prepare the students for engagement with longer readers such as short stories, essays or novels. This in turn paves the way for Sustained Silent Reading (SSR) which had been advocated by Stephen Krashen (2003, 2004) as a means to increase vocabulary, spelling and comprehension skills in students. Krashen and Williams (2012) asserted that students engaging in SSR have more positive attitudes towards reading than those who do not participate in SSR programs.

## **RECOMMENDATIONS**

The red box (Box 1) which is targeted at 5 to 7 year old native English speakers suited Form 1, which were 13 year old Malaysian ESL students. Equally, blue (Box 2) and green (Box 3) targeted at 8 to 10 year old and 11 year olds and older learners respectively, were suitable for Form 2 and 3, that is 14 and 15 year old ESL speakers in Malaysia. The location of the boxes has to be decided to avoid unnecessary lifting and carrying of the heavy materials in and out of classrooms. To ensure that the cards in the boxes are tidied at the end of each week, either a student or teacher custodians need to be appointed. In a large school with several classrooms, a schedule might need to be devised to ensure that all classes get a fair and equal chance of using the materials.

When first introducing the materials, 45 to 60 minutes are necessary to go through a cycle of reading, answering and recording with students. Once the system of using the materials is clear, a 30 minute period per fortnight might be sufficient for reading and to avoid boredom with the activity.

## CONCLUSION

Overall, the students and teachers participating in the trial rated the Reading Comprehension Boxes as enjoyable and valuable for learning English. Future research will need to examine the long term benefits of the materials in terms of improvement of English language scores. In the meantime, the trial's findings lead to a roll-out of the materials across the nation-wide network with secondary students in more than 40 schools having access to this resource. It is hoped that the lessons learnt through this trial will benefit other schools, students and educators in Malaysia.

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