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Using Raphael's QARs as Differentiated Instruction with Picture Books

In Taiwan, economic, social, and cultural differences within the population are associated with great disparities in English proficiency among students in elementary schools. As a result, some teachers confront a two-peak phenomenon in their classes, where one third of the students have never studied English, while another third may already have read *Harry Potter*. This phenomenon requires a way to plan and implement differentiated instruction methods in the curriculum to reflect the reality that learners differ in important ways. When teachers differentiate instruction, they consciously and conscientiously make the content, processes, and learning outcomes of instruction accessible to all students, regardless of race, gender, ethnicity, language, or differing abilities (Tomlinson 2001).

One technique for differentiated instruction that I employ in my classes is the strategy to improve reading comprehension known as *Question Answer Relationships* (QARs) (Raphael 1982, 1986). QARs are extremely effective in enhancing learners' reading comprehension and questioning skills at different levels. In this article, I will briefly describe the four types of Raphael's QARs and their demonstrated beneficial effect on learner engagement and reading ability. Utilizing Krauss's (1945) *The Carrot Seed*, I will illustrate one way to use QARs with reading comprehension tasks and associated writing exercises for elementary school learners with different levels of English proficiency.

The four QAR types

QARs comprise an established method that involves applying questioning strategies to texts in order to improve reading comprehension. There are four types of questions: (1) *Right There* questions have only one answer that can be found at one place in the reading text; (2) *Think and Search* questions have answers that can also be found in the text, but because there may be more than one correct answer, students must put different

parts of a story together in order to answer them; (3) *Author and You* questions are not answered directly in the text and require the reader to read between the lines, using prior knowledge and information from the text to make inferences; and (4) *On Your Own* questions are related to students' experiences and feelings on a topic and can be answered without reading the text (Raphael 1982, 1984, 1986). It is important to note that the answers to question types 1 and 2 can be found in the book, while answers to question types 3 and 4 are based on what the learner knows.

An adaption of QARs put forth by Lawrence (2002) to prepare students for standardized tests uses a "traffic light" analogy with three types of questions: (1) *Green Light* questions are the simplest kind, where students can go to one spot in the text to find the answer; (2) *Yellow Light* questions oblige students to slow down and proceed with caution as they take time to look in more than one place in the text to assemble an answer; and (3) *Red Light* questions compel readers to stop and think about the text and about what they already know, as the answer cannot be found solely in the text. Learners must have a clear understanding of what was read and use their prior experience and knowledge to answer *Red Light* questions.

Benefits of using Raphael's QARs

QARs can be a part of any literacy program designed to help students become strategic, independent readers and competent writers. In a study by Ezell et al. (1992), reading comprehension training with QARs was conducted with 23 third-grade children at three levels of achievement (low, average, and high) and was followed by class-wide peer-assisted sessions for learners to practice asking and answering questions. The study concluded that the children's performance on both answering and asking comprehension questions improved through the use of QAR strategies acquired in a peer-assisted instructional format, with low-, average-, and high-achieving children all showing gains.

Mesmer and Hutchins (2002) used QARs to help students interpret graphics and charts. They consider QARs an excellent vehicle for metacognitive instruction because the process of categorizing graphics, discussing how answers are obtained, and determining why an answer is correct requires readers to reflect on their own thought processes. Once readers begin thinking about these issues, they are on the way to a deeper analysis and are more able to understand the differences between graphics as well as the relationships depicted.

Raphael and Au (2005) believe that a QAR framework provides a straightforward approach for reading comprehension instruction with the potential of closing the literacy achievement gap. According to the authors, QARs serve as a reasonable starting point to address the problems that stand in the way of moving all students to high levels of literacy.

Jones and Leahy (2006) affirm that QARs actively engage students in the questioning process. The different skills required to answer the four types of questions allow students to become aware of their own thinking processes as they ask and answer questions. Moreover, generating questions facilitates deeper thought than does merely answering questions. In order to ask good questions about the text, students must revisit the text, process its important elements, and choose what content to highlight for questions and answers. QARs also help students to think aloud, which helps them become aware of and analyze their own learning processes.

Storytelling with picture books

Storytelling is an inherently motivating task. Learning English through stories helps students acquire basic language functions and structures, vocabulary, and language-learning skills. Stories can be selected to match the language level of the students, as well as to link English with other subjects across the curriculum.

In many elementary schools, picture book stories are widely used to supplement the main textbook for English instruction. Picture books not only encourage cross-cultural comparison and learning but also cater to different learning styles and develop different types of intelligences (Brewster, Ellis, and Girard 2002). The use of picture books for reading instruction has several benefits for younger learners, due to the interesting pictures, dialogues, and plots. Besides their wonderful and thought-provoking illustrations, picture books are great for English

learners—the words or sentence patterns are repeated often enough to enable students to predict their appearance and thus contribute to an advanced reading ability.

For these reasons I chose Krauss's (1945) *The Carrot Seed* for a QAR-based reading and writing lesson. The story is about a boy who plants a carrot seed. Although his family keeps telling him that the carrot will not come up, he still pulls up the weeds and waters the seed every day. Finally, the carrot comes up.

Differentiated reading lesson: *The Carrot Seed*

Before starting the differentiated lesson, I design four learning corners in the classroom that are based on the four QAR question types. After the first storytelling, students complete tasks in one or more of the learning corners, depending on their language level. Each learning corner contains at least one copy of the picture book to be read, as well as a worksheet containing questions at the appropriate QAR level (see the Appendix for examples of the four worksheets).

To begin the lesson, the students sit in a circle while I use the picture book to tell them the story. (A high-level student could also read the story.) After the first reading, I explain that students will go to a corner, pick up the worksheets, and write their answers on them. I make it clear to students that since they have different English proficiency levels and because everyone learns differently, they should choose their tasks based upon their proficiency levels. All learners must go to Corner 1 (*Right There*) and Corner 2 (*On Your Own*) and answer the questions. They can work independently or with other classmates. Learners with higher English proficiency levels easily answer questions in Corners 1 and 2 and then go to Corner 3 (*Think and Search*) and Corner 4 (*Author and You*) and try to answer all the questions there.

In addition to worksheet columns for "Question Type" and "Question," students will find columns for the "Answer" and "How did you find the answer?" For the *Right There* question 1, "What did the boy plant?" students could write "He planted a carrot seed" under the "Answer" column. In the column "How did you find the answer?" they can copy the whole sentence, "A little boy planted a carrot seed" and circle "carrot seed." Students can also write "page number," "teacher," or "classmates" in the "How did you find the answer?" column. For *Think and Search* question 3, "How did the boy feel at the end?" the students could write "He felt happy" in the "Answer" column. In the "How did you find the answer?" column students might draw a picture based upon the one on the last page of the book, which shows the boy smiling.

If students with higher English proficiency levels regard the picture book itself or the questions in the four corners as being too easy, they are asked to generate their own questions related to the picture book or the topic.

Scaffolding: Gas Station

Learners need to be challenged, but with support and assistance that permit them to perform. Therefore, it is important to provide scaffolding for students with different proficiency levels. In my lesson this is accomplished at the "Gas Station." The term Gas Station comes from the Chinese term *Jia You*, which literally means "refuel" but could be translated into English as a term of encouragement like "go for it." Drivers need to refuel if they run out of gas, and similarly when learners lack certain skills or feel discouraged, they need teachers' encouragement and support. The Gas Station is set up to provide students with scaffolding help that both challenges and supports them. This scaffolding allows them to perform at a level slightly above their current understanding (Vygotsky 1978). As a teacher, I stay at the Gas Station, but higher-level learners can be trained to be teaching assistants and stay in the Gas Station as well. Learners can come to me for help—for example, if they have forgotten how to spell a word or do not understand a question on the worksheet. Dictionaries, pictures, and charts are also provided in the Gas Station for students' references.

Differentiated writing lessons: *The Carrot Seed*

After learners answer the questions at the four learning corners, I lead a whole class discussion, and students can volunteer or be called on to share their answers. Sometimes I will ask learners to share their answers with a partner sitting next to them. Then students choose one of three previously designed writ-

ing assignments based on their own interests and proficiency levels.

The first writing assignment is called *Small Book* and is designed particularly for learners with lower English proficiency levels. This design does not demand too much English, so learners with lower proficiency levels can complete the task without difficulties. Learners are given the handout depicted in Figure 1, and they fill in the blanks, draw pictures based on the sentences, and fold the handout into a book.

The second type of writing assignment is called *Dialogue Writing* and is shown in Figure 2. Learners use the questions from the QAR activities and worksheets to write a dialogue. (They can also write a dialogue on a related situation from their lives.) This task is designed for learners with intermediate or higher English proficiency levels because writing a sample dialogue is a good exercise for them to put words into sentences. In addition, learners have to draw pictures based on the dialogue. Students can work in pairs or small

Cover The _____ Seed By _____	**Page 1** I plant a ____ seed.	**Page 2** My ____ tells me, "It won't come up."	**Page 3** My ____ tells me, "It won't come up."
Page 4 My ____ tells me, "It won't come up."	**Page 5** I water the plant.	**Page 6** I pull the weed.	**Back** The ____ comes up as it should.

Figure 1. Small Book example

Name: _____

Pictures

Sample dialogue:

John: *I found something special in my garden.*

Mary: *What was it?*

John: *A carrot.*

Mary: *Did you plant it?*

John: *Yes, I planted the carrot seed on May 20th.*

Figure 2. Dialogue Writing example

groups, but there should not be more than five in each group.

The third type of writing task is the *Writing Journal* (see Figure 3), which is designed especially for learners with higher English proficiency levels. Learners brainstorm words or phrases related to a certain topic or story, draw a picture, and work in pairs or a group of three; they use selected questions from the QAR worksheets to write a journal entry based on the words and picture.

As with the Gas Station, scaffolding is an important component for student writing success. Scaffolds provide important models and support from teachers and peers and assist students in comprehending and producing written language patterns (Peregoy and Boyle 2008). Therefore, models or samples of these three types of writing assignments are an integral part of the writing lessons.

Assessment of the writing tasks

To assess the writing task, all learners participate in an oral presentation individually, in pairs, or in groups, regardless of what writing assignment they chose. Each learner is graded individually, and the assessment is based on five criteria with different percentages: accuracy (25%); creativity (25%); presentation (25%); illustration (15%); and level appropriateness (10%). Compared to advanced learners, students with lower English proficiency levels usually choose *Small Book* as their writing assignment, and as this is exactly at their proficiency level, they will not be graded down but instead receive the total score for level appropriateness. On the other hand, if students with higher English proficiency levels choose *Writing Journal*, they will also receive the full score for level appropriateness. Students who complete tasks above their proficiency levels are acknowledged by direct praise in class and also in their school reports. Students who work in groups are graded based on the English proficiency levels and the writing assignments they choose.

Conclusion

The implementation of Raphael's QARs as differentiated instruction is not limited to picture books, but can be used in teaching other genres (e.g., novels and short stories). In all cases, teachers should select authentic materials that are accessible, useful, and relevant for learners' English learning. Moreover, instruction time, learners' conceptual level, and ability to concentrate should be considered. Teachers can access a wide selection of picture books with varying themes and language levels online for free at the following sites: www.magickeys.com/books; www.kizclub.com/stories.htm; www.starfall.com; www.gutenberg.org; www.freebookspot.es (look under "For Children").

The integration of QARs into picture-book instruction is an excellent way to involve

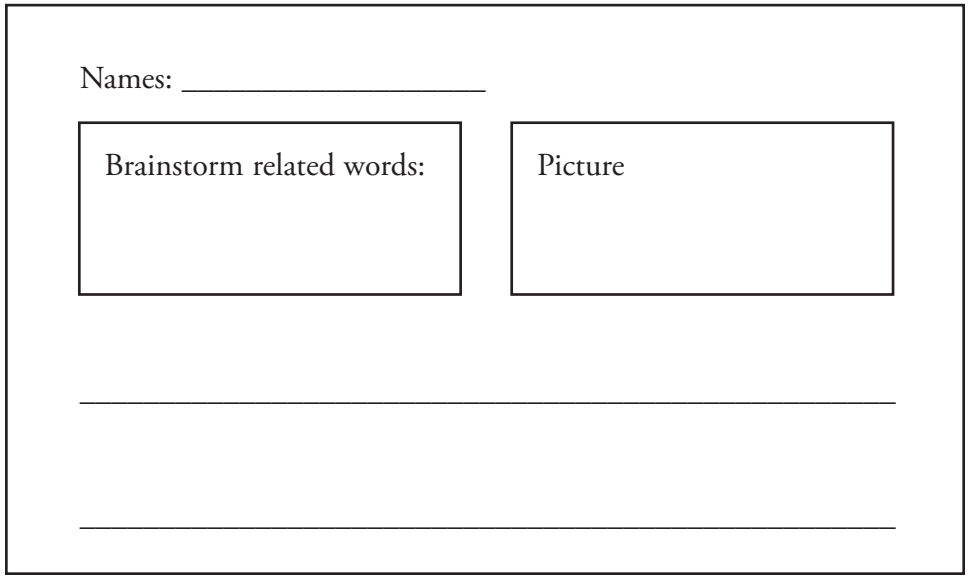

Figure 3. Writing Journal example

and support all students with different needs in a mixed-level English classroom. Carefully constructed QAR activities and materials allow students of all levels to participate equally in engaging activities and obtain an increased understanding of texts and an improved ability to answer and ask questions. Differentiated instruction with QARs allows students to work in appropriate learning corners and experience the freedom to choose reading and writing tasks that are challenging yet not too easy or too difficult for their level. From my experience, this is something they greatly enjoy.

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Corner 1 Worksheet for *The Carrot Seed*

Question Type	Question	Answer	How did you find the answer?
Right There	1. What did the boy plant?		
	2. What did the father say to the boy?		
	3. What did the mother say to the boy?		
	4. What did the big brother say to the boy?		
	5. What happened to the seed?		
	6. What did the boy do?		

Corner 2 Worksheet for *The Carrot Seed*

Question Type	Question	Answer	How did you find the answer?
On Your Own	1. Is this a good book for you to read by yourself?		
	2. Is this a good book for you to read with a friend?		
	3. Do you like this book?		
	4. Have you planted any seeds before?		

Corner 3 Worksheet for *The Carrot Seed*

Question Type	Question	Answer	How did you find the answer?
Think and Search	1. What does a plant need?		
	2. How did the boy feel when nothing came up?		
	3. How did the boy feel at the end?		

Corner 4 Worksheet for *The Carrot Seed*

Question Type	Question	Answer	How did you find the answer?
Author and You	1. In your opinion, why did the boy keep on watering the plant and pulling the weeds?		
	2. Were you surprised at the end? Why or why not?		