CHAPTER TWO
LITERATURE REVIEW

This chapter contains two parts. First, some theories regarding reading comprehension will be introduced. Second, several instructional strategies will be presented, especially the description of Questioning the Author and the related studies.

Reading Comprehension

Reading comprehension is a complicated mental process, including word recognition process (Rubin, 1993) and meaning elicitation from text. Sweet and Snow (2003) take reading comprehension as the system of “simultaneously extracting and constructing meaning” (p.1). Extracting meaning refers to word decoding and the relationship of print and sound while constructing involves meaning building and the integration of new messages with old experiences. About extracting and constructing meaning collaboratively to achieve text understanding, Robinson (2005) points out that some scholars say understanding the text simply represents receiving the unique message of the author’s intention (Gibbs, 1999, 2001; Hirsch, 1976, 1987), whereas others define comprehension as relevant to readers’ unique background knowledge and experiences (Hammadou, 1991; Kintsch & Kintsch, 2005; McNamara & Kintsch, 1996; Nassaji, 2002; Robinson, 2005; Rosenblatt, 1978, 1983; 1993, 2005). Despite that comprehension is the reproduction of the writer’s idea or contains multiple meaning generated by each reader, the relationship among writer, text and reader is closely linked. What follows are some theories concerning reading comprehension.
Schema Theory

Schema theory is often a resourceful foundation which researchers resort to in terms of background knowledge. A reader’s schema is his/her “knowledge already stored in memory, function in the process of interpreting new information and allowing it to enter and become a part of the knowledge store” (Anderson & Pearson, 1984, p. 255). According to Chang (2002), two kinds of schemata have been widely recognized. One is content schema, referring to “reader’s general world knowledge or knowledge of the subject matter” (p. 2); the other is formal schema, referring to “readers’ knowledge of the text structure or rhetorical form” (p. 2). Schema theory asserts that reading is a process of meaning construction by linking old information to new concept experienced in text (Chang, 2002). Thus, comprehension achieves when readers’ schema and the text tie together. However, there are times when readers comprehend something beyond the text. Inferences may occur when there’s a gap between what the text states and what readers perceive. The relationship between schema and inference is discussed in the following section.

Schemata and Inferences

In cognitive processing, inferencing, occurring when either to save the text message in the knowledge store or to retrieve it from the mechanism, played an important role in the comprehension process. According to Anderson and Pearson’ schema-theoretic view (1984), at least four kinds of inferences can be categorized in reading comprehension. The first type is “schema-selection” (Nassaji, 2002, p. 447). This type of “inferences may be involved in the process of deciding what schema among many should be called into play in order to comprehend a text” (Anderson & Pearson, 1984, p. 269). Anderson and Pearson provide an example about inferring a
ship christening schema when readers read a lead sentence from a newspaper article showing that a famous person attended a ceremony involving a new ship.

The second type is “schema instantiation” (Nassaji, 2002, p. 447). This type of “inference is also involved in the process of instantiating slots within a selected schema” (Anderson & Pearson, 1984, p. 269). Readers generally generate inferences when they need to decide a specific character or item stated in the passage is meant to “fill a particular slot” (p. 269).

The third type is “default inferencing” (Nassaji, 2002, p. 447). Anderson and Pearson defined it as a slot filling in a schema “by assigning default values in the absence of any specifically substantiating information in the text” (Anderson & Pearson, 1984, p. 269). Writers may omit some information because they think readers with shared knowledge can infer precisely.

The fourth type is “absence of knowledge inferencing” (Nassaji, 2002, p. 447). This type of “inference involves drawing a conclusion based upon lack of knowledge” (Anderson & Pearson, 1984, p. 269).

According to Kintsch (1998), encountering reading, readers start to activate different types of inferences, whether knowledge-driven or data-driven, and reach a comprehension, especially when the text is written in poor quality (Beck et al., 1997; Kintsch, 1998; McNamara & Kintsch, 1996; Nassaji, 2002). Thus, schema offers a solid base for readers to generate inferences for different reading. Evidences in the recall that do not match the text are the products of readers interacting with texts, activating schema and presenting different layers of understanding. In the present study, the inferences generated in written recalls can be categorized as text-based and reader-based inferences. The first three types of inferences proposed by Anderson and Pearson (1984) belong to text-based inference. Readers may judge from the clues the text reveals to fill in the gap by producing inferences mainly based on text.
Reader-based inference is identified as the fourth type according to Anderson and Pearson (1984). Readers make inferences from their own knowledge to explain the text or understand from their own experiences.

Schema theory provides ample proofs to explain comprehension in terms of memory and inferences. Activating old information to integrate new messages reaches deeper understanding of the passage. In this study, besides inferences, QtA queries (will be described in later section) owe much to the theory. Queries try to elicit readers’ accounts of words, thinking and elaborations based on what they read. Readers would understand the literal meaning of the text first when responding to the queries and then expand to deep understanding. On one hand, they absorb the new message. On the other hand, they start to activate the knowledge store of long-term memory and finally arrive at a personal comprehension.

**Construction-Integration Model**

Schema theory is weak in explaining some of the controversies the researchers found (Nassaji, 2002), for the comprehension process does not always take place within a top-down system, referring to background knowledge. An alternative perspective, Construction-Integration Model, which is a “more bottom-up, loosely structured process” (Kintsch, 1998, p. 94), emerges to play a role in the field of mental processing. Kintsch’s theory that highly relates to research on working memory capacity and recall of text comprehension mainly focuses on comprehension processes to trace how meaningful text is flexibly created by sensible readers in a proper context.

In Construction-Integration Model, comprehension begins with chaotic ideas. These wild ideas go through a process of integration, become stabilized, and accomplish well-structured coherence. Unlike schema theory that activates only the
right information from the background knowledge, the Construction-Integration Model accepts all possible ideas that appear in the beginning of the constructing process, and then the right information is settled in the integration stage where readers rule out the irrelevant information.

To be more specifically, in the comprehension process, a mental representation of a text can be described in two phases: the textbase and the situation model. The textbase is composed of the “elements and relations that are directly derived from the text itself” (Kintsch, 1998, p. 103). It includes microstructure and macrostructure. Microstructure represents idea units (proposition) in the local level of the text while macrostructure refers to the hierarchically structured organization of the text, which belongs to the global level. The surface structure of the text is the element of the textbase. When readers process the text, some of the exact words or phrases will be kept for a short time. This surface memory may play a role, for example, in some experiment or “in memory for actual conversation” (Kintsch, 1998, p. 105). Thus, the words or phrases may be nodes of the network, that is, “the propositions of a text together with the inferences and knowledge elaboration a reader has produced” (p. 98). Then the nodes will be kept in long-term memory and will be included as relations in the textbase. For example, readers should be aware of the relations of rhymes when processing poetry.

The second phase is a situation model. Constructing a situation model may require every kind of knowledge element, for example, a causal link inferred between implicitly stated propositions, or elaboration implied in the images in the text. Situation models include everything not explicitly stated in the text and “readers recognize certain text structure and can use this knowledge to impose an organization on the text” (p. 106). A situation model is “a construction that integrates the textbase and relevant aspects of the comprehender’s knowledge” (p. 107). Due to differences
among readers and contexts, the elaborations of the text may depend on the text and on the readers; therefore, a situation varies.

The situation model differentiates two processes. In the construction process, text propositions are known from the text input. The construction of propositions in the text, whether indirectly related, subordinated to another or negatively linked, form a network. The network includes the propositions a reader has generated as above-mentioned. The integration process is a process of constraint satisfaction to eliminate irrelevant textual clues that hinder comprehension. Relevant textual information becomes stabilized and is strengthened to aid comprehension. This process cycles itself whenever a new element is “added to the network under construction” (p. 101).

The situation model is the foundation of text interpretation because all knowledge implicitly and explicitly reached a coherent state in a situation model. The text-based model is inadequate to explain text understanding. In addition to constructing text units or making inferences (text-based inferences) for comprehension, readers need to integrate the text propositions with their own knowledge or personal experience for deep and complete understanding, that is constructing a situation model (propositions stored in long-term memory). The construction of a situation model is a combination of isolated memory structure and the reader’s personal store of knowledge and experience (reader-based inferences). Thus, a whole text processing is taken place. Van Dijk & Kintsch (1983) proposed that

“…to understand the text we have to represent what it is about. If we are unable to imagine a situation in which certain individuals have the properties or relations indicated by the text, we fail to understand the text itself. If we do not understand the relations between the local facts and the global facts to which the text refers, we do not understand the text” (p. 337).
With the Construction-Integration Model, readers successfully construct the propositions from the text and integrate them with their global knowledge and reach a full comprehension of text understanding.

In the present study, the Initiating Queries of the QtA training help construct the textbase of the passages, Follow-up Queries and Narrative Queries even focus on the plot development push readers to integrate what they read with what they know in the discussions. A unique situation model is formed for individual reader when he/she combines the textual information with personal knowledge.

Although the Construction-Integration Model presents a clear view of how mental processing influences comprehension, the relationship between reader, text and author has not been touched upon. Another model is, therefore, being introduced to explain a successful reading involving a competent writer and an engaged reader.

**Rosenblatt’s Transactional Model**

Another model is Rosenblatt’s transactional model. In the model, reader achieves comprehension in the transaction between the text and the reader. While reading the text, each individual reader brings his/her own “personal linguistic-experiential reservoir, the residue of past transaction in life and language” (Rosenblatt, 1993, p. 381) to the transaction for meaning construction. That is, the exchange of ideas between readers and texts becomes a rich and vivid activity for readers to experience knowledge wholly and evoke feeling flexibly. Rosenblatt (1993), a language-art specialist, claimed that reading proceeds like dynamic transaction between reader and text and the meaning of a text is placed within a context.

“Meaning emerges as the reader carries on a give and take with the signs on the
page… The two-way, reciprocal relation explains why the meaning is not “in” the text or “in” the reader. The poem or the novel or the play exists in the transaction that goes on between reader and text” (1995, p.27, cited in Mills, Stephens, O’Keefe & Waugh, 2004).

Encountering printed pages, readers bring out various interpretations at particular time and location for different texts (Huang, 2004). Sometimes the reader’s understanding coincides with the author’s intention. Other times the reader might miss some points or elaborate more than the writer had expected. Since everyone is unique with his/her own special experience, reading is made from the author’s written form to the reader’s perceived thinking.

The transactional theory consists of two readings: efferent and aesthetic (Rosenblatt, 1978, 1993). The efferent reading (from Latin, efferre, to carry away) focuses on the intellectual part. Readers acquire information that the text reveals and they organize and retain it at the brain. The language aspect and the knowledge domain are what readers need to pay attention to, remember, integrate, evaluate and apply after the reading activity. On the other hand, the aesthetic reading centers on the emotion and personal experience that have been ignited during reading. In the reading process, readers make use of their stored knowledge and show reflection toward the text or respond to it based on individual experience. The transacting process is a continuum between these two readings. Whether readers take the factual or the affective standpoint lies in the proportion of which aspect formed during reading. One text might present two different kinds of reading and elicits various interpretations. Deciding which stand to take upon reading requires readers’ selectivity.

Transaction theory was linked to reader-response theory (Rosenblatt, 1983) and suggests that readers need to be critical of the images that texts reveal and the premises that they brought to the transaction. Rosenblatt’s assertion of the notion:
being critical is being selective. This will drive readers to reassess the value of reading and of life. Readers with critical eyes know how to select among possible interpretations and decide the proper one to complete the transaction (Rosenblatt, 1993).

The idea “to be selective” (Rosenblatt, 1993) is later expanded to contain a democratic spirit (Mills, Stephens, O’Keefe & Waugh, 2004). Taking what particular stand to adopt is the reader’s own choice. Cherishing individuals’ choice and interpretation is highly valued. Inspired by this personal transaction, readers may develop their significance for reading and become a life-long reader (Applegate et al., 2002). The essence of equality is, thus, emphasized.

The present study borrows some of the ideas advocated in the transactional model. The model urges interpretive variability because meaning construction incorporates a transaction between a reader with certain perspective and background knowledge and a text that influences different readers in distinct occasions. Questioning the Author adopted in the current study facilitates readers’ process in interacting with the text and interpreting the content. With available content, readers reflect deeply on it, negotiate with the writer, and generate distinctive meaning according to which stand to choose, information-based or experience-based, and gradually cultivate a habit of processing the text critically to become individual readers. The theory sets the base for readers to transcend textual information and read from within.

To sum up, reading is a complex activity. People can understand a text in terms of prior knowledge, propositions constructed in a mental representation of the situation described in the text or the transaction between reader and the text. During comprehension, a working mental model keeps updating to reserve information relevant to the situation being described, readers resort to schemata to specify the
implied situation in the text and later respond to the situation with emotions or personal experience. Incorporating the view from the perspective of cognitive psychologists and the belief of language art specialists supports the idea of “promoting student readers to be more active as they read” (Pressley & Wharton-McDonald, 2002, p. 249). Therefore, these directions to comprehension finally combine as one to form the theoretical background of the present study.

**Instructional Strategies**

Reading instruction improves readers’ comprehension and fosters skilled readers. In the 1960s, comprehension lies solely on “decoding and recitation” (Gambrell et al., 2002, p. 5), but later since the 1980s, reading instruction emphasizing on thinking skills has been recognized. When Durkin (1978-1979) mentioned teachers spent most of classroom time asking literal questions and neglecting proper guidance for students to read successfully, the notion of how to facilitate comprehension in the classroom has been noticed.

**Questioning**

It goes without saying that questioning plays a critical role in classroom (Gauthier, 2000). Penticoff stated that “Questioning is fundamental to understanding. As teachers we always ask questions of our students to learn about their comprehension” (2002, p. 636). Cairney also pointed out questioning has been regarded as “an essential tool” of the teacher (1990, p. 28), for it is “the most common method of assessing and promoting comprehension” (Flippo, 1997; Heilman, Blair & Rupley, 1994).

According to Flippo (1997), teachers can pose questions before, during and after reading to fit different purposes. Pre-reading questions are used to activate
prior knowledge; during reading questions are for connecting important information or assessing students’ ability to use it; post-reading questions are taken mainly to assess the recognition of key points and help students summarize the whole thing.

Besides the findings that the timing to pose questions may influence comprehension, evidences have shown that questions focusing on complex organization of the passage contribute to learning (Gauthier, 2000; Gorder, 2003; Harvey & Goudvis, 2000; McDaniel, 2004; Sandora et al., 1999). Thus, application of higher-level questions should be highlighted in the process of teaching.

**Taxonomy of Questions**

As every reader processes reading variously, comprehension as well as question-type can be classified into different levels. Some categorization will be introduced.

Bloom’s taxonomy (1956) contains six levels, including knowledge, comprehension, application, analysis, synthesis, and evaluation. This taxonomy can be applied broadly in types of questions asked in classrooms (Wigg & Wilson, 1994). For example, knowledge level starts with “who,” “what,” “where,” and “when” questions. Questions about “how” and “why” questions belong to comprehension level. Application level involves “what if,” or “what’s wrong with...” questions. Questions regarding “why,” or “how are...alike/different” are included in analysis level (Wigg & Wilson, 1994). In this taxonomy, some readers read simply for information gathering at locally knowledge level while others may comprehend the text through a critically evaluative standpoint at globally evaluative level.

Besides Bloom’s widely used taxonomy, another well-known taxonomy is Barrett’s (1976). Her taxonomy of reading comprehension (1976) includes literal comprehension, inferential comprehension, evaluation and appreciation (Barrett, 1976;
Johnson & Pearson, 1978; Rubin, 1993). Literal comprehension calls for the recognition or recall of ideas, information and details that can be traced in the text. Inferential comprehension is activated when readers use a synthesis of the text read, the background knowledge or imagination to form hypotheses. Evaluation is found when readers make judgment about the text. And appreciation is related to readers’ awareness of literary forms or techniques to promote emotional responses.

Another extensive taxonomy was Banton Smith’s (1963). Since reading entails thinking (Rubin, 1993), the taxonomy presents different levels of thinking as well. The levels are hierarchically-ordered: literal comprehension, interpretation, critical reading and creative reading. Literal comprehension requires lower-level thinking, so that readers recall mainly from memory. Interpretation demands a higher level of understanding. To achieve this level of understanding, readers should decipher the suggested or implied messages. Critical reading is an even higher understanding that requires readers to evaluate. Readers need to collect, interpret, apply, analyze and synthesize the gained information. The highest level is the creative reading for readers to jump out of the framework of the text and produce new solutions the writers failed to touch upon.

Applegate, Quinn, and Applegate (2002) identified the questions from eight of the most popular informational reading inventories (IRIs). They chose two passages in random and the accompanying questions and classified four types of open-ended reading comprehension questions from them: literal, low-level inference, high-level inference and response items. Literal items require answers stated explicitly in the text. Low-level inference items ask for background experience. High-level inference items demand readers to link experience with the text and draw a logical conclusion. Response items impose on readers for a broader sense of understanding and react to the underlying meaning of the passage. Examples of the types of
questions are given in Table 1. Literal and low-level inferences were categorized as text-based thinking while high-level and response as response-based thinking (Applegate et al., 2002, p. 177). It is found that the widely used IRIs contain questions that are mainly text based, requiring readers to recall the author’s idea (Applegate et al., 2002; Tierney & Pearson, 1992). The response-based questions are below ten percent of all items, so items that require the ability to integrate with their personal knowledge and to consult their high-level thinking are still sporadic.

Table 1. Types and Examples of Open-ended Comprehension Questions

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
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<tbody>
<tr>
<td>Literal questions</td>
<td>The text states <em>Mary, a character in the story, is in fourth grade.</em></td>
</tr>
<tr>
<td>Low-level inference</td>
<td><em>Question: “What grade was Mary in?”</em></td>
</tr>
<tr>
<td>items</td>
<td>The text states <em>Mr. Wilson’s car would not start. Mr. Wilson was late for work.</em></td>
</tr>
<tr>
<td></td>
<td><em>Question: “Why was Mr. Wilson late for work?”</em></td>
</tr>
<tr>
<td>High-level inference</td>
<td>The text describes two characters and several circumstances in their lives.</td>
</tr>
<tr>
<td>items</td>
<td><em>Question: “Why do you think that the two characters in the story became friends?”</em></td>
</tr>
<tr>
<td>Response questions</td>
<td>The story describes characteristics of two young children on a field trip.</td>
</tr>
<tr>
<td></td>
<td><em>Question: “If you were a teacher, which of the two children would you rather have in your class and why?”</em></td>
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</tbody>
</table>


Besides levels of understanding, what follows is taxonomy of questions developed by Pearson and Johnson (1978). There are (1) text-explicit: questions whose answers are obviously stated in the text (Raphael, 1986, calls this “Right There”); (2) text-implicit: questions whose answers require inferencing from the text (Raphael calls this “Think and Search”); (3) scriptally implicit: questions whose answers are beyond the scope of the text, requiring background knowledge (Raphael
calls this “In My Head”) (Flippo, 1997).

What is more, Hill and Parry (1994) point out three kinds of comprehension require various processes in reading. These three kinds of comprehension are a combination of “a social-educational model of comprehension and a psycholinguistic one” (p. 259). These tasks, originated from Bloom and van Dijk and Kintsch (1983) are: (1) literal: concerning the textbase; (2) inferential: building a situation model from the textbase; (3) experiential: linking the situation model to personal knowledge. These processes can be fulfilled as a continuum because they may occur at the same time and it is hard to distinguish from one another. Hill and Parry (1994) proposed to incorporate these three kinds of comprehension in reading assessment because the three kinds of tasks offer a useful complete framework for reading comprehension.

Tracing a list of different taxonomies regarding reading comprehension, the researcher found that different layers of understanding could be cross-references. The three types of questions adopted in the present study mainly come from Pearson and Johnson’s classification (1978) and Hill and Parry’s model (1994). Factual questions are used to evaluate students’ ability to grasp literally text-explicit information, which is the knowledge level (Bloom, 1956) and belongs to literal comprehension (Barrett, 1976; Smith, 1963). Interpretive questions evaluate students’ inferentially text-implicit comprehension, which coincides with Bloom’s comprehension level (1956), Smith’s interpretation level (1963) and Applegate et al.’s lower-or higher inferences (2002). Responsive questions assess experientially scriptally-implicit connection, which is the application level in Bloom’s taxonomy and attributes to response items in Applegate et al.’s level of understanding. Three types of questions used in this study can completely evaluate various levels of textual understanding. Not only what the words mean but also what work in the readers’ minds and how these readers link new concepts with old experiences will present a
clear view about questions and reading comprehension.

However, as a warning, in addition to a wide use that questioning plays in the classroom, teachers, obsessed by the idea that questioning leads to effective teaching, try to ask as many questions as possible in most of the instruction time. However, they look for a single answer only, requiring no elaboration (Gorder, 2003; Hyman, 1982; Pearson, 1985; Wade & Moje, 2000). Beck, McKeown, McCaslin and Burkes (1979) even found that the classroom questions were random, detail-directed and useless for students to construct an entire picture of the story. Dillon (1982) cast doubt about the effect of conducting questions like this when teachers know the answer themselves and hoped to elicit it from students. With such interaction, students are bound within the limited scope of classroom discourse, let alone develop the ability to full bloom. The type of questioning might fail to ignite the spark of classroom learning and result in the lack of desire to know what the teacher teaches (Cairney, 1990). Thus, teachers should be cautious when questioning in class.

Four Instructional Scaffolds

After the idea of questioning is considered, some notable strategies relating to questioning are introduced. Villaume and Brabham (2003) list several effective instructional scaffolds with a research basis explaining what competent readers do. They include question-answer relationship, reciprocal teaching, literature circle and questioning the author. Employing a scaffold that others have constructed during reading offers teachers and students a “temporary framework” (p.116) that contributes to different teacher-student interaction patterns, various personal response and the inclusion of strategy teaching in the text reading (Fielding & Pearson, 1994; Villaume & Brabham, 2003).

Question-Answer Relationship (QAR). An instructional strategy, designed by
Raphael (1986), called Question-Answer Relationship, helps students “realize the need to consider both information in the text and information from their own background knowledge” (Raphael, 1986, p.517, cited in Rubin, 1993). It enhances students’ abilities to answer comprehension questions. This approach helps students better differentiate what information is stated or implied, assisting to improve inferential reasoning.

Research has proved the effect of the strategy. Raphael and Pearson (1982) found that Grade 4, 6 and 8 given the training performed better in answering questions. Another study by Raphael, Wonacott and Pearson (1983) supported the previous result by having fourth grade teachers trained with the strategy and having them instruct students with it.

**Reciprocal Teaching (RT).** Reciprocal Teaching is an instructional strategy to enhance students’ reading comprehension. The process involves a dialogue between the teacher and students to construct meaning of the text together. The teacher introduces four RT strategies to students and models how to apply them to help students become independent readers when they manipulate the tools in reading process.

Four reciprocal teaching strategies include: (1) Summarizing: offers a chance to distinguish, restate and combine meaningful information in the text; (2) Questioning: strengthens the summarizing strategy and leads the learner to be more involved in the comprehension activity; (3) Clarifying: is necessary when readers confront confusing ideas in the reading; (4) Predicting: provides room for students to imagine the coming text (Palinscar, 2003).

Palinscar and Brown (1984, 1989) conducted studies to examine the effect of reciprocal teaching. At-risk students or the ones in special education from about 300 middle schools and 400 primary schools participated in the research. After a 20-day
treatment, around eighty percent of the students, primary school level as well as middle school level, showed improvement in the assessments which required them to recall, draw inference, find the gist and apply the idea in the text to a new condition.

Rosenshine and Meister (1994) conducted a “meta-analysis of 16 studies of reciprocal teaching” (Palinscar, 2003, p. 106). In the study, the reciprocal teaching was compared with several traditional reading instruction and the students ranged from Grade 1 to above. Although the effect of the reciprocal teaching on standard test was not so salient, the result still favored the reciprocal teaching group.

**Literature Circle.** Literature-based instruction has received more attention in recent years. Using children’s literature in classroom discussion is one unique feature of the approach. The elements of the strategy include an enthusiastic teacher with sufficient knowledge, a friendly setting to promote social interaction with a chosen book, a negotiating pattern for students to do with the book and available time and texts for students to read and respond to (Galda, Gullinan & Strickland, 1993, cited in Morrow & Gambrell, 2000). Moreover, a read-aloud activity conducted daily is one key feature in a literature-based program (Morrow & Gambrell, 2000).

Morrow (1992; Morrow, Pressley, Smith & Smith, 1997) conducted two studies to see the effect of literature-based programs. Both studies showed similar results that the trained group outperformed the other group, meaning the literature-based program has positive effects.

Baumann and Ivey (1997) conducted a year-long qualitative study to probe into how Grade 2 students learned in a literature-based classroom. The result supported the efficacy of this instruction approach in a literature-based environment.

Besides these three instructional approaches, Questioning the Author, a research-based method developed by Beck and her colleagues, is the key in this study and will be introduced in details in the following section.
Questioning the Author

Questioning the Author (QtA) is an approach for teachers to instruct reading based on text (Salinger & Fleischman, 2005). It is a teaching strategy to enhance student engagement with text. Unlike the previously mentioned strategies, QtA addresses the role of a writer. The teacher informs students that authors of texts may make mistakes and fail to explicate their ideas. Students need to construct their own meaning by thinking deeply rather than accepting whatever the author presents (Ogle & Blachowicz, 2002) while reading. Understanding of the text is achieved through discussion in class (Beck et al., 1997), which means QtA requires the spirit of collaboration (Palincsar, 2003). The essence of QtA is fully explained in the following three parts. The first part is about the characteristics of QtA. The second describe the procedure and the third explains the related studies of QtA.

Characteristics. First, the use of queries is unique in this approach. Beck and her colleagues (1997) stated that meaning of the text is constructed through discussion in a QtA lesson, using queries. In a QtA lesson, students are taught to interact with the text, “grapple with ideas” (Beck et al., 1997, p.6; McKeown et al., 1993), and construct their own meaning (Beck et al., 1997; Beck & McKeown, 2001; Beck & McKeown, 2002; McKeown & Beck, 2004; Salinger & Fleischman, 2005). Collaboration among students even with the teacher forms a rich discussion when encountering the initial reading. Queries are questions, different from traditional ones, asked by the teacher concerning the significant or confusing idea in the text to help students connect text (what they read) and discussion (how they proceed). Personal interpretation, then, is therefore generated.

Second, the role of a teacher is different. QtA lessons meet with the recent trend in recent comprehension research (Pearson & Fielding, 1996). In this trend,
the core is that the teacher is a facilitator and works collaboratively with students in literature classrooms. During discussions, teachers present their interpretation of the story and welcomes students’ ideas as well. The teacher is not an authority who dominates and students are provided with more possibilities to decide, talk and think. The classroom is no longer dominated by the teacher only. Students as well as teachers create a significant learning setting.

Third, the notion of constructing is highlighted. Learners should actively use knowledge in order to understand something. This conception of learning is called constructivism (Beck et al., 1997). Constructivism is a learning theory which reiterates that every learner constructs his or her ideas, rather than receiving ideas from a teacher. The personally unconscious process is comprised of re-clarifying knowledge either from personal experience or from communication with other world to form a crystal picture of the world (Selley, 1999).

From a constructivist view of understanding, students should figure out what information is significant and how the ideas connect. The construction comprises more than getting what is read or heard. Students will understand when they construct themselves (Beck et al., 1997). In QtA lessons, students do not retrieve or repeat text information, but they use text information to reach understanding of important ideas. The following example given by Beck et al. (1997) shows two responses from students representing the difference between getting information and constructing meaning from texts. After reading a passage that describes an immigrant’s arrival in America, the teacher opens a discussion by asking, “So what has the author told us about Mama?” Two students responded orally:

Student 1: She came from Norway to San Francisco, and when she got off the boat in San Francisco, she thought it looked just like Norway.

Student 2: From the first time she saw San Francisco, even though it was a brand new place for her, it felt like home. She said that it looked like Norway, her home that she came
Unlike the first student, the second one provided answers beyond what was explicitly stated. The student thought about the information and interpreted the ideas, so he/she showed better understanding with a deep involvement with the message. Thus, the second response, rather than the first one, is what a QtA teacher expects to elicit from students.

**Procedure.** There are three steps to implement a QtA lesson. A teacher has to (1) segment the text, (2) plan queries before instruction, and (3) make good use of discussion moves during instruction. Each aspect is explained in details.

First, the teacher reads, determines major understandings students need to capture, and finds out potential problems students may have. Then the teacher starts segmenting the text where there are key or confusing ideas. Sometimes one single sentence is one segment because it contains important ideas while several paragraphs which have only one big idea may be segmented (Beck et al., 1997).

Second, there are three kinds of queries: Initiating Queries, Follow-up Queries and Narrative Queries. Beck and her colleagues suggest that a teacher design Initiating Queries to lead a discussion, anticipate how students might respond, develop possible Follow-up Queries to stay on the focus and move the discussion, and form Narrative Queries to concern with “authorship, purpose and structure” (Beck et al., 1997, p. 41) to aid readers to read deeply (Beck et al., 1997; McKeown et al., 1993; McKeown et al., 1999). They provide a list of examples of Queries, which is shown in Table 2.
Table 2. Example of Queries: Initiating, Follow-up and Narrative

<table>
<thead>
<tr>
<th>Queries</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiating Queries</td>
<td>What is the author trying to say here?</td>
</tr>
<tr>
<td></td>
<td>What is the author’s message?</td>
</tr>
<tr>
<td></td>
<td>What is the author talking about?</td>
</tr>
<tr>
<td>Follow-up Queries</td>
<td>What does the author mean here?</td>
</tr>
<tr>
<td></td>
<td>Did the author explain this clearly?</td>
</tr>
<tr>
<td></td>
<td>Does this make sense with what the author told us before?</td>
</tr>
<tr>
<td></td>
<td>How does this connect with what the author has told us here?</td>
</tr>
<tr>
<td></td>
<td>Does the author tell us why?</td>
</tr>
<tr>
<td></td>
<td>Why do you think the author tells us this now?</td>
</tr>
<tr>
<td>Narrative Queries</td>
<td>How has the author let you know that something has changed?</td>
</tr>
<tr>
<td></td>
<td>How has the author settled this for us?</td>
</tr>
<tr>
<td></td>
<td>Given what the author has already told us about this character,</td>
</tr>
<tr>
<td></td>
<td>what do you think he’s up to?</td>
</tr>
</tbody>
</table>


Third, discussion moves are the core of QtA lessons. Discussion moves are used to support and advance the conversation during discussion. Beck et al. (1997) categorized the moves into marking, turning back, revoicing, modeling, annotating, and recapping. Using these moves, the teacher is, therefore, able to guide students to think, understand, and engage with the text skillfully. Table 3 gives more details of discussion moves.

Table 3. Discussion Moves in QtA

<table>
<thead>
<tr>
<th>Moves</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking</td>
<td>Stress important ideas in the text.</td>
</tr>
<tr>
<td>Turning back</td>
<td>Go back to the text or turn back responsibility to students.</td>
</tr>
<tr>
<td>Revoicing</td>
<td>Repeat or highlight what students say.</td>
</tr>
<tr>
<td>Modeling</td>
<td>Think aloud and demonstrate.</td>
</tr>
<tr>
<td>Annotating</td>
<td>Give more information about the text.</td>
</tr>
<tr>
<td>Recapping</td>
<td>Conclude key points.</td>
</tr>
</tbody>
</table>


To implement the planned segments, queries and discussion moves in the
classroom, the teacher might read one planned segment and stops with queries like: Initiating Query “What is the author trying to say here,” Follow-up Query “Does the author tell us why,” or Narrative query “How has the author settled this for us?” When students miss the important message, the teacher might “mark” the key points, so that necessary information will not be overlooked by students. When the content of the discussion does not fit the text or the teacher explains too long, the teacher might “turn back to text” or “turn back to students.” The teacher might “revoice” students’ statements when he/she wants to repeat or highlight students’ ideas. The teacher might “model” how to think or interact with the text so that students can learn and imitate the process. When students encounter difficult information, the teacher might “annotate” to provide explanation to the concept. At the end of the segment or discussion, the teacher might “recap” the discussion and conclude with a brief summary (Beck et al., 1997; McKeown et al., 1999). Students then start thinking toward the track, contribute to individual ideas one after another and finally communicate successfully with the “invisible” writer (Ogle & Blachowicz, 2002).

**Related Studies.** Questioning the Author not only originates from a research-based framework but also reaches a practical recognition. Some studies were conducted to evaluate the effect of a QtA lesson. The following is an account of the studies.

Beck, McKeown, Sandora, Kucan and Worthy (1996) did a yearlong study of two teachers and 23 fourth graders implementing QtA in their own classroom and found a great improvement from pre- to post-test results. Two tools developed by Beck et al. were introduced to two teachers in advance. One is a Modeling Protocol “to be used by the teacher to demonstrate how a reader might think through the ideas presented in a text in order to build understanding” (p. 388). The other tool is a set of queries developed “to initiate and focus discussion about texts” (p. 389). Familiar
with how QtA functioned, the teachers started implementing the approach in social studies and reading/language arts classes. For teacher implementation, two distinct features were noted. First, questions which teachers asked focused on extending meaning, not retrieving information. Second, the responses of teachers were to extend the conversation in the classroom rather than to evaluate students’ ideas.

Data gathered in the study include videotapes of lessons on social studies and reading/language arts and one baseline lesson before using QtA approach for each class, notes of the meetings with the teachers, observation summaries, each teacher’s journal entries, debriefings and lesson narratives, students’ responses to individual comprehension tasks as pretests and posttests and interviews with students about their view of QtA.

The results show that the amount of student talk has doubled and students begin asking more questions. In addition, more student-to-student interactions have been found out and evidences have shown QtA could “facilitate thinking” (p. 411).

Another study done by Sandora, Beck, and McKeown (1999) compared the effects of the Questioning the Author discussion technique and the Great Books approach. Great Books (Denis & Moldof, 1983) is a post-reading discussion technique that aims to improve students’ comprehension, elicit their thinking and form a lifelong habit for reading. These two approaches both give students chances to interact with the text, construct meaning and share ideas with others. However, QtA conducts discussions during initial reading while Great Books has discussion after the whole story is read. What is more, although questioning format is adopted by two approaches, QtA uses Initiating and Follow-up Queries whereas Great Books applies a set of questions from fact, interpretation to evaluation.

All students in the sixth- and seventh-grade classes of a school were involved in the study. Students read and discussed four stories from the Junior Great Books
series. The sixth graders used the QtA approach, and the seventh graders used the Great Books approach. After reading, students were asked to provide a free recall of the story and to respond to open-ended questions. The result revealed that means for scores on both the recalls and the responses to the open-ended questions were higher for the students who participated in the QtA lessons. Further analyses indicated that students in the Questioning the Author discussions, although lower in grade level, gave longer recalls and better interpretations than students in the other lessons, but the explanation about evaluation was not presented in their study.

After four instructional scaffolds are given, we find Questioning the Author is favorable. Even though QAR focus on the question format designed by Pearson and Johnson (1978), teachers do not demonstrate how they think for students. Also, reciprocal teaching is an integrated method that covers many dimensions. It, however, lacks the consideration of an author who may write incomprehensible text. As for literature circle, the content is mainly literature, not including other types of text. Questioning the Author that includes teacher modeling, consideration of author’s message and application in expository and narratives texts does not have the above-mentioned weakness.

Although the QtA approach has been implemented successfully as a research-based cooperative approach over the years in primary schools for L1 readers (Beck et al., 1997; Beck & McKeown, 2001; McKeown & Beck, 2004), whether this approach can be applied in an EFL context is unknown. The previous studies have shown the advantages of Questioning the Author which gets students more involved in text and in classroom discussions. However, in Beck et al.’s study, no control group was used for comparison (1996). In Sandora et al.’s study, both groups were in different grade levels (1999). Therefore, in the present study, the researcher would add a control group of the same grade level to compare the effect of the
intervention. Furthermore, the researcher would adopt some parts of Sandora et al.’s study (the QtA strategy with recall and questions as measurements) with some modifications to see whether junior high students in EFL classrooms would benefit from the strategy and find reading interesting and meaningful during the reading process. The following chapter is the design of the study.