CAPSTONE PROJECT- WRITTEN REPORT

AN INQUIRY INTO READING COMPREHENSION STRATEGIES AND THE INTEGRATION OF FORMATIVE ASSESSMENT

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**Abstract:**

The capstone project focused on reading comprehension strategies and the integration of formative assessment in language teaching. This project is a follow-up of a similar study conducted in Singapore that aimed to find the effectiveness of integrating formative assessment in the teaching reading comprehension. It is a qualitative study carried out during the four months stint in Maryland, USA with the Distinguished Fulbright Awards in Teaching Program 2010-2011. This study included visits to a number of elementary schools, interviews with reading specialists and teachers, observations of reading lessons. It is also based on readings pertaining to the project topic. The purpose of the study is to inquire about the pedagogical and assessment practices in reading comprehension during language teaching and learning in the elementary school classrooms in US and postulate its relevance to the Singapore context.

**INTRODUCTION**

“Reading maketh a full man…” said Sir Francis Bacon. Reading is a lifelong skill which one should acquire as a child. Psycholinguist Goodman, K.S. stated that ‘Reading is a psycholinguistic guessing game. It involves an interaction between thought and language’ (1967). Reading is a dynamic and complex process (Pressley & Afflerbach, 1995) that involves skills, strategies, and prior knowledge. It is developmental in nature (Alexander, 2005), and it consists of identifiable components, word recognition and comprehension, for example that interact to make reading successful (Afflerbach, P. 2007). Assessing reading formatively is the process of constructing meaning through the dynamic interaction of the reader’s prior knowledge, the information suggested by the written text, and the context of the situation. Formative assessments gauge students’ progress and tell teachers when students are ready to leave the intervention. They should be used during the course of a reading intervention to track the progress of the group and make decisions about what should happen next for each student. It is only through on-going decision-making based on
formative assessments that a teacher can ensure students get the most from the reading intervention program. This capstone project concerns reading comprehension focusing on engaging pedagogy and the integration of formative assessment.

**BACKGROUND**

As a Master Teacher in my home country, one of my tasks is to provide professional development training to teachers on content, pedagogy and assessment. Hence, I have been conducting experimental teaching in schools using innovative methodologies to enhance students’ language skills and observing teachers’ teaching and students’ learning extensively. During this course, I learnt more about students’ difficulties in their reading comprehension skills. As a follow-up to my observations, I conducted action research study to explore the integration of formative assessment into reading comprehension teaching strategies and its effectiveness to enhance students’ understanding and responding skills in summative assessment. A selective sample of 6 primary schools from a cluster were chosen in which 120 primary students from primary 5 level and teachers were involved in this study. The intervention employed the use of formative assessment strategies such as questioning techniques and providing quality feedback which were infused in 3 experimental lessons during classroom teaching. The findings showed positive change in teachers’ and students’ attitude to a certain extent towards teaching and learning of reading comprehension and enhanced pupils’ reading comprehension skills.

As a Fulbright Teacher, I decided to further explore on the similar topic for the capstone project during my stint in USA with the following objectives:

1. to inquire about the strategies used in language teaching to enhance elementary students’ reading comprehension skills
2. to explore the integration of formative assessment tools used in the reading comprehension during language teaching
3. to design a professional development program in the area of reading comprehension and the integration of formative assessment in language teaching
In line with the objectives, I crafted the following research questions:

1. What are the various strategies used in language teaching to enhance elementary students’ reading comprehension skills?
2. How is formative assessment integrated in reading comprehension during language teaching?
3. How should professional development in the area of reading comprehension in language teaching and the integration of formative assessment be designed?

**METHOD**

**Procedure**

This study was conducted during my four months stint in Maryland, USA with the Distinguished Fulbright Awards in Teaching Program 2010-2011. This project is a follow-up of a similar study conducted in Singapore that aimed to find the effectiveness of integrating formative assessment in the teaching of reading comprehension. It is a qualitative study and the data was gathered from a number of elementary schools visits, lesson observations during the visits, literature readings and interviews with reading specialists and teachers. The collated data together with the gained learning experiences and key observations enabled me to find the answers to the research questions to a certain extent.

**Data gathering**

**School placement and visits**

I was placed in a neighborhood elementary school once a week for approximately two months. The school has effective reading programs in language teaching. During this period, I shadowed the ESOL (English for Speakers of Other Languages) teacher who has 9 years of teaching experience and observed her teaching the ESOL students from Grade 1 – 5. I also conducted pre and post conferencing with her to clarify my understanding of ESOL programs and teaching of reading comprehension practices. I visited ten other elementary schools where I had the opportunity to observe a few reading lessons and to
interview 4 reading specialists and to discuss their schools’ reading programs, reading assessments and teacher professional development.

**Guidance from academic experts at UMD**

I attended two courses in the fall semester at the University of Maryland. One is on Assessment for Student Learning Development and the other is on Qualitative Research for Education. My knowledge about assessment and research designs further increased with my participation during class discussions. The readings and resources provided by the respective professors were useful for the literature review. A university faculty mentor was assigned to me. We discussed my study on a regular basis. Two other academic experts of reading literacy and assessment were provided guidance and resources for the study.

**Literature Review**

According to *No Child Left Behind Act* (2001) in USA, the research shows that children who read well in the early grades are far more successful in later years. Reading is undeniably one of the foundations for success in society. Reading requires understanding, or comprehending, the meaning of print. ‘Reading comprehension is the ultimate goal of reading. After all, knowing how to decode words has little value if comprehension is missing. Reading comprehension is complex process of constructing meaning by coordinating a number of processes, including decoding, word reading, and fluency along with the integration of background knowledge and previous experiences’ (Snow, 2002).

Reading is all about understanding. The reason we teach strategies to kids is because, by using strategies as they read, their understanding and comprehension is enhanced. They make connections to the text. They ask questions and wonder. They create mental images and visualize by “making movies in their minds”. They use background experience, prior knowledge, and comprehensible input to draw conclusions and inferences. They determine what is important in informational texts and content-area reading. They answer the question, “How has my thinking changed?” by synthesizing as they read. They constantly
monitor the strategy used by asking the big question: Does it make sense? They do all this with the expectation that what they read will make sense.

**Reading comprehension Strategies**
To address the first question, the following are the various reading comprehension strategies (commonly used by the reading teachers in elementary schools I visited) and those gleaned from the literature readings that I referred:

1. **Before, During and After (BDA) Strategy**

<table>
<thead>
<tr>
<th>Before reading</th>
<th>During reading</th>
<th>After reading</th>
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<tbody>
<tr>
<td>• Activate their prior knowledge</td>
<td>• Construct and revise meaning</td>
<td>• Evaluate whether the text met their purpose for reading</td>
</tr>
<tr>
<td>• Are clear about why they are reading a particular text</td>
<td>• Monitor their understanding of the text</td>
<td>• Revisit their predictions and questions and adjust and revise them if necessary</td>
</tr>
<tr>
<td>• Know what type of text they are about to read</td>
<td>• Continue revising and adjusting their predictions and questions</td>
<td>• Are able to summarize what they have read</td>
</tr>
<tr>
<td>• Preview the text</td>
<td>• Use a variety of strategies to determine the meaning of unknown words and concepts</td>
<td>• Synthesize what they have read</td>
</tr>
<tr>
<td>• Make predictions</td>
<td>• Make connections with ideas in the text</td>
<td></td>
</tr>
<tr>
<td>• Ask questions</td>
<td>• Make inferences</td>
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</table>

Teacher modeling is critical to teach reading comprehension strategies to students. Vygotsky believed that a great deal of development was mediated by expert scaffolding. Children first experience a particular set of cognitive activities in the presence of experts, and only gradually come to perform these functions by themselves. Scaffolding involves the setting up of “temporary supports, provided by capable people that permit learners to participate in the complex process before they are able to do so unassisted” (Peregoy and Boyle, 1997, p. 81). Comprehension strategies with effective scaffolding like BDA would help students to acquire comprehension skills.
2. Reciprocal Strategies

Reciprocal teaching (Palincsar, A.S. & Brown, A.L. 1984) has two major features:
(i) instruction and practice of the four comprehension strategies—predicting, question generating, clarifying, and summarizing and 
(ii) a special kind of cognitive apprenticeship where students gradually learn to assume the role of teacher in helping their peers construct meaning from text.

There are four important instructional practices embedded in reciprocal teaching:
   i. Direct teaching of strategies, rather than reliance solely on teacher questioning
   ii. Student practice of reading strategies with real reading, not with worksheets or contrived exercises
   iii. Scaffolding of instruction; students as cognitive apprentices
   iv. Peer support for learning

Reciprocal teaching involves a high degree of social interaction and collaboration, as students gradually learn to assume the role of teacher in helping their peers construct meaning from text. In essence, reciprocal teaching is an authentic activity because learning, both inside and outside of school, advances through collaborative social interaction and the social construction of knowledge.

Other than the above four instructional practices of Reciprocal Teaching, there are additional strategies in the teaching of reading comprehension surfacing most often in the literature review. They are:

1. activating prior knowledge
2. self-monitoring/clarifying
3. predicting
4. questioning
5. making connections
6. visualizing
7. inferring
8. summarizing
9. synthesizing
3. Seven Keys to Comprehension

Susan Zimmerman and Chryse Hutchins (2003) introduced the following 7 keys to comprehension as strategies to enhance students’ skills where some are the similar strategies as mentioned above:

1. Motion picture of the mind: sensory images
   Students create a wide range of visual, auditory, and other sensory images as they read, and they become emotionally involved with what they read.

2. Making connections: background knowledge
   Students use their relevant prior knowledge before, during and after reading to enhance their understanding of what they’re reading.

3. Why, what, where, who and how: questioning
   Students question to clarify, inquire, understand and reconfirm. Their questioning is fundamental and indicates their engagement in learning.

4. Weaving sense into words: drawing inferences
   Inferring involves forming a best guess about what the ‘evidence’ (words, sentences, and paragraphs) means; speculating about what is to come; and then drawing conclusions about what was read to deepen the meaning of the literal words on the page.

5 & 6. What is important and why: determining importance and synthesizing
   An important aspect of comprehension is being able to distinguish between the nonessential information and the essential information. Determining importance has to do with knowing why reading and then making decisions about which information or ideas are most critical to understanding the overall meaning of the piece.

7. Cultivating Awareness: Fix-up strategies
   • Go back and reread; Read ahead to clarify meaning
   • Identify what it is that they do not understand: word sentence or concept
   • If it is a word, read beyond and use context clues to help understanding.
   • If it is a sentence in a picture book, look at the pictures.
• If it is a concept, try to summarize the story up to the confusing spot. If that doesn’t clear it up, maybe need to build more background knowledge

4. Skimming and Scanning
Skimming is a fast-reading technique where the student glances quickly over a text to get an overall sense of it. It is not necessary to read every word. Titles, headings and pictures may help the student to get the gist of what the text is about. Reading the first and last sentences of a paragraph can be helpful. Skimming a text is a strategy that prepares the reader for what they are about to read. If the readers have formed an opinion on what they are about to read, it sets a purpose for reading. Effective readers use skimming to make decisions about whether the text will meet their needs.

Scanning is a fast reading technique that is used when looking for specific information in a text. Being able to scan helps students to locate specific information in a text. When the task requires the student to find specific information and not read the entire text, scanning is the most efficient strategy to use.

5. Literature Circle
Literature circle is a student-centered strategy that aims to encourage student-choice and a love of reading. It combines the best practices of collaborative learning and student-directed learning. It involves formative assessments such as observations, conferencing and evaluation (portfolios, projects and student artifacts) by both the teacher and the student. Furthermore, current research indicates that peer collaboration has a positive effect on student learning and performance in Language Arts (Fall et al., 2000), increases student learning, and also improves reading comprehension and content-knowledge (Klinger, Vaugn and Schumm, 1998, cited in Daniels, 2002). Literature circles conducted by using predefined discussion roles such as Clarifier, Summarizer, Questioner, Predictor and so on that students take turns fulfilling. When using this strategy, students’ comprehension skills are enhanced as they engage with texts and one another.
6. **Fix-it strategies**
Students use fix-it strategies when difficulties arise during reading and they evaluate their reading by making a connection between text and self; text and of their world knowledge; text and another text; visualize; reread, predict and so on in relation to the goals. It is a form of self-assessment in reading.

7. **Interactive Read-aloud**
During the interactive read-aloud, the teacher reads the text and guides the discussion while the students are bunched up on the floor with clipboards and pencils. They listen, talk to each other, and jot or draw their thinking. With this practice, all students are free to listen to and think about the ideas in the text because decoding does not interfere. They process the information by turning and talking throughout the instruction. Picture books, big books, posters and charts offer great texts for interactive read aloud.

8. **Think-aloud**
In a think-aloud, teachers model thinking for students. Teachers open up minds and show children how he/she actually think while reading. The think-aloud strategy asks students to say out loud what they are thinking about when reading or simply responding to questions posed by teachers or other students. Effective teachers think out loud on a regular basis to model this process for students. In this way, they demonstrate practical ways of approaching difficult problems while bringing to the surface the complex thinking processes that underlie reading comprehension, or problem solving, and other cognitively demanding tasks.

9. **Turn and Talk**
When providing whole-group instruction, the teacher stops every few minutes to ask students to turn to each other and share their thinking, giving them a better shot at understanding. This integrates the use of cooperative learning structures.
10. **Paired reading**
When students read in pairs, teachers stress the idea of *active listening*. Teachers make it clear that the listener has the biggest job. The listener takes notes while listening to the reader – jotting or drawing any questions, connections, or reactions and then sharing those when the reader has finished reading.

11. **Work Talk**
When teachers instruct students to practise the strategies that they have taught, they are chatting in threes or fours or at tables. As students read, write, or draw, they have the same kinds of conversations that co-workers or collaborators have when they sit side by side. These conversations enhance everyone’s productivity.

12. **Use of Think sheets/Graphic organizers**
Think sheets include graphic organizers such as the Venn diagram, sequencing map, cause and effect diagram and so on. They promote engaged, active reading, help students sort the information, and encourage them to work out their thinking.

13. **Vocabulary Development**
Vocabulary is a student’s knowledge of words and word meanings. Words come in two forms; print vocabulary and oral vocabulary. Print vocabulary includes all the words a student recognizes and uses in their reading and writing. Oral vocabulary refers to all the words a student uses in listening and speaking.

Vocabulary can present problems for students when:
- a word is new to them, i.e. they have not come across it before
- a word has a different meaning in a different context; for example in science, the words ‘material’, ‘table’ and ‘properties’ take on a new meaning
- they are asked to use the language of instruction, for example ‘compare’, ‘explain’.
Some activities that support vocabulary development:

- Brainstorm it – sort it
- Predict the words
- Key word story strips
- Key word hunt
- Predict and scan
- Dictionary activities
- Spot the clues
- Word of the week chart
- Word map/wall

Elementary/Primary school teachers have the most important job in all of education, that is welcoming young children to the amazing world of reading. Helping students to understand, enjoy, remember, and apply what they read is the most important single gift a teacher can ever give. ‘Learning to Read’ carefully and deeply opens doors that can never be slammed shut and ‘learning to read’ becomes ‘reading to learn’. Reading is the gateway to the boundless world of information, amazement, amusement, and problem-solving.

Reading comprehension is the evolution of thought that occurs as we read. True understanding happens when readers merge their thinking with the text, using the comprehension strategies to ask questions, draw inferences, think about what is important, summarize and synthesis. This enables them to use their new understanding to ask further questions and guide new learning. This active, constructive, strategic thinking process entails far more than simply retelling.

**Formative Assessment**

To explore the answer to the second question which is about the integration of formative assessment in the teaching of reading comprehension, I gleaned some ideas for the integration of formative assessment in language teaching from the literature review I did. During my lesson observations, I found that reading Specialists and teachers mostly used *questioning techniques* and *feedback strategies* in teaching.
Assessment is an integral part of learning and teaching. Assessment provides information to answer important questions such as whether pupils have learned and how well they have learned. Essentially, it refers to all the activities undertaken by teachers and pupils that provide information to be used as feedback to modify learning and teaching activities. It serves the purpose of accountability to stakeholders and provides input to help pupils improve (Black & William, 1998).

The general term assessment is used to refer to all those activities undertaken by teachers and by their students in assessing themselves that provide information to be used as feedback to modify teaching and learning activities. Such assessment becomes formative assessment when the evidence is actually used to adapt the teaching to meet student needs (Black & William, 1998, p.140). Formative Assessment can assist teachers to determine learning progress and to identify future emphasis for individuals and groups according to their needs. Teachers make judgments about student achievement through their observations and questioning and then provide feedback to coincide with learning in order to allow students to assess and review their progress towards learning goals.

**Teacher Observations**

As trained professionals, teachers are typically good observers of student learning. They base their observations on the belief that all students can learn. Teachers’ day-to-day observations are a legitimate and important part of classroom assessment. They help teachers make meaningful judgments on student learning. Observations can be structured or unstructured; they can be in the form of anecdotal notes or various types of teacher developed checklists and rating scales. Scoring rubrics are a useful way to report the results of student learning. They list criteria for student performance or products of work and set guidelines that distinguish between levels of student performance. A rubric describes what to look for at various levels of performance and provides indicators or specific examples of what to look for in a sample of a student's work. Rubrics often appear in the form of a grid that includes criteria for the learning objectives and the descriptors for different levels of performance. Rubrics developed with student input can be powerful.
learning tools. Recorded observations can provide assessment information on a wide range of learning targets from student behavior to group work skills to individual performance in different areas.

**Questioning**
Since the fourth century BC, Socrates is credited with developing a method of rigorous questioning that serves two purposes: (1) using the question as a guide to inquiry and thinking and (2) using questions to determine what the person who answers the question knows. A teacher poses questions that encourage thinking in new ways and questions that provide the opportunity to assess students’ learning from text (Afflerbach, 2007). Questioning is prominent in present-day classrooms. 5W1H questions (What, Who, Where, When, Why and How) are the commonly used questions. They can be integrated in teaching in the following different forms and means:

1. **Initiate- Respond-Evaluate (IRE) Discourse form**
The IRE model describes classroom practice in which teachers Initiate classroom talk by asking questions, students Respond to the questions, and then the teacher Evaluates students’ responses (Cazden, 1986). In reading, IRE questions often focus on literal and simple inferential comprehension of text.

2. **K-W-L strategy**
The KWL strategy (Ogle, 1986) that requires students to ask the following questions: What do I Know about the text? What do I Want to learn from the text? What did I Learn from the text? The strategy is popular not only as a questioning routine but is a means of helping students develop strategic approaches to reading.

3. **Question-Answer-Relationship (QAR)**
QAR strategies (Raphael & Wonnacott, 1985) help students understand the connections between questions that are asked and the answers that students give in response. In effect, the QAR approach helps students become meta-cognitive about the relationship of
the meaning that is constructed through reading with the comprehension questions we ask them. The table below shows an example for the QAR:

<table>
<thead>
<tr>
<th>In-the-Text Questions</th>
<th>In-My-Head Questions</th>
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</thead>
<tbody>
<tr>
<td><strong>Right There Question</strong></td>
<td><strong>Author and You Questions</strong></td>
</tr>
<tr>
<td>e.g. Who is the main character?</td>
<td>e.g. Would you have made the same choice the character made?</td>
</tr>
<tr>
<td><strong>Think and Search Question</strong></td>
<td><strong>On-My-Own Question</strong></td>
</tr>
<tr>
<td>e.g. How did the character return home?</td>
<td>e.g. Do you know what it is like to feel jealous?</td>
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</table>

4. **Questioning the Author**

Questioning the Author (Beck et al., 1997) is a means teachers use to help students learn good questions to ask the authors of the texts they read and teachers to gauge the development of students’ ability to read critically. It may also help students make accurate attributions for their comprehension of the text.

5. **Bloom’s Taxonomy of Thinking Questions**

Bloom’s Taxonomy of learning (1956) proposes that learning can evolve from relatively simple understanding (assessed with a literal comprehension question) to complex evaluative understanding (assessed with questions that focus on students’ critical appraisal of what is learned). The following tables show the Bloom’s Taxonomy and the revised version and the questioning chart.
There are many types of questions we may ask when we assess students. Our questions should reflect the nature of learning and thinking we expect of our developing readers. Questions are influenced by diverse factors that include their structure, syntax, and vocabulary as well. Effective questioning practice reflects our attention to factors that include wait time, the questions’ relation to retelling and discussion, and the development of a series of questions that represent a range of comprehension levels (Afflerbach, 2007).
**Feedback**

An essential part of formative assessment is feedback to the learner, both to assess their current achievement and to indicate what the next steps in their learning trajectory should be (Paul Black et al. 2003:42). Feedback is providing information to an individual which focuses on their performance or behavior. The feedback provided should be delivered in a positive manner and lead to action to affirm or develop an individual’s performance or behavior. Feedback provided should not be of a personal nature and should focus on hard data, facts or observed examples of evidence.

There are 3 types of feedback. They are:

<table>
<thead>
<tr>
<th>Affirmation feedback</th>
<th>Developmental feedback</th>
<th>Effective feedback</th>
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<tbody>
<tr>
<td>Affirmation feedback is provided as soon as possible after a performance has been observed. ‘Well done, Ben, you observed safe working practices while preparing a window mount for your artwork.’</td>
<td>‘Nancy, next time you stretch paper, use gum strip instead of masking tape to secure the paper to your drawing board.’</td>
<td>Effective feedback is tailored to meet the needs of the individual and is directly linked to observable evidence – either a learner’s written or practical work or a performance of a given task.</td>
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<tr>
<td></td>
<td></td>
<td>o It focuses on individual action points.</td>
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<tr>
<td></td>
<td></td>
<td>o Effective feedback deals with one point at a time.</td>
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</table>

There is no doubt that learners can and do benefit from effective feedback as they will know how well they are progressing; are informed of their strengths and of areas they need to improve; know what they need to do to improve. ‘Quality of feedback given to learners has a significant impact on the quality of learning’ (Black and William, 1998).
The above *Assessment-Feedback-Learning Cycle* describes the processes that teachers are likely to go through when integrating assessment with the planning and teaching of a unit of instruction. The following questions, which are in line with the Cycle, aim to guide teachers in integrating assessment with instruction:

- **What do I want to find out about my pupils’ learning?**
- **What learning outcomes do I want my pupils to achieve?**
- **How can I plan for effective classroom discussions, questions and activities to support my pupils’ learning?**
- **How can I scaffold their learning?**
- **What types of evidence do I need so that I know my pupils have achieved the outcomes?**
- **What kind of assessment modes will provide me with the evidence I need?**
- **How can I improve my pupils’ learning by adjusting my teaching strategies?**
- **What feedback can I provide my pupils to enable them to improve?**
The following are examples of formative assessments suggested in *Classroom Assessment Techniques (CAT): A Handbook for College Teachers*, 2nd Ed. by Thomas A. Angelo and K. Patricia Cross.

Selected CATs for getting feedback on student learning and response to teaching:

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<tr>
<th>Name:</th>
<th>Description:</th>
<th>Purpose:</th>
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<tr>
<td>Minute Paper</td>
<td>During the last few minutes of the class period, ask students to answer on a half–sheet of paper: “What is the most important point you learned today?”; and, “What point remains least clear to you?” The purpose is to elicit data about students’ comprehension of a particular class session.</td>
<td>Review responses and note any useful comments. During the following class periods emphasize the issues illuminated by the students’ comments.</td>
</tr>
<tr>
<td>Chain Notes</td>
<td>Students pass around an envelope on which the teacher has written one question about the class. When the envelope reaches a student he/she spends a moment to respond to the question and then places the response in the envelope.</td>
<td>Go through the student responses and determine the best criteria for categorizing the data with the goal of detecting response patterns. Discussing the patterns of responses with students can lead to better teaching and learning.</td>
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<tr>
<td>Memory matrix</td>
<td>Students fill in cells of a two–dimensional diagram for which instructor has provided labels. For example, in a music course, labels might consist of periods (Baroque, Classical) by countries (Germany, France, Britain); students enter composers in cells to demonstrate their ability to remember and classify key concepts.</td>
<td>Tally the numbers of correct and incorrect responses in each cell. Analyze differences both between and among the cells. Look for patterns among the incorrect responses and decide what might be the cause(s).</td>
</tr>
<tr>
<td>Directed paraphrasing</td>
<td>Ask students to write a layman’s “translation” of something they have just learned–geared to a specified individual or audience—to assess their ability to comprehend and transfer concepts.</td>
<td>Categorize student responses according to characteristics that are important. Analyze the responses both within and across categories, noting ways you could address student needs.</td>
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### One-sentence summary

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<thead>
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<th>Name:</th>
<th>Description:</th>
<th>Purpose</th>
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<tr>
<td>Students summarize knowledge of a topic by constructing a single sentence that answers the questions “Who does what to whom, when, where, how, and why?” The purpose is to require students to select only the defining features of an idea.</td>
<td>Evaluate the quality of each summary quickly and holistically. Note whether students have identified the essential concepts of the class topic and their interrelationships. Share the observations with students.</td>
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### Exam Evaluations

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<th>Description:</th>
<th>Purpose</th>
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<td>Select a type of test that you are likely to give more than once or that has a significant impact on student performance. Create a few questions that evaluate the quality of the test. Add these questions to the exam or administer a separate, follow-up evaluation.</td>
<td>Try to distinguish student comments that address the fairness of grading from those that address the fairness of the test as an assessment instrument. Respond to the general ideas represented by student comments.</td>
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### Application cards

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<tbody>
<tr>
<td>After teaching about an important theory, principle, or procedure, ask students to write down at least one real-world application for what they have just learned to determine how well they can transfer their learning.</td>
<td>Quickly read once through the applications and categorize them according to their quality. Pick out a broad range of examples and present them to the class.</td>
<td></td>
</tr>
</tbody>
</table>

### Key Observations and Learning Experiences

Key observations were gathered from my placement at an elementary school, visits to other elementary schools, discussion with ESOL teachers of the schools and interviews with Reading Specialists.

**Key Observations**

- In line with the federal law of No Child Left Behind act in US, the elementary schools I visited mainly focused on Reading Instruction and Reading Assessment from K-6 grades for Language and Arts. There are structured reading programs, for example, Teach-Coach-Reflect (TCR) Mentorship, Accelerated Reading, Study Island Reading, Read
Together, Champion Reader, Family Literacy, Book Log and others. The assessment practices widely used are Developmental Reading Assessment (DRA), Scholastic Reading Inventory (SRI), Formative Assessment System Testing (FAST), Dynamic Indicators for Basic Early Literacy (DIBEL) and Qualitative Reading Inventory (QRI).

- Accommodation is provided for the different abilities and needs of the students by the ESOL and Special Education teachers using means such as pull-out, plug-in, co-teaching, parallel teaching, and station-based teaching methods. Students’ individual learning needs are taken care of by the accommodation provided through the Individual Education Program (IEP). Teachers use a variety of co-teaching models, for example, Team teaching (shared instruction), Station teaching (rotation between groups of different content), One lead, one support, Parallel teaching (2 groups, same content) and Alternative teaching (separate group, different content). There is also the Talented Gifted Program (TAG) and the Special Education Program (SPED).

- The reading instruction, programs and assessments are mandatory in schools which are aligned with the State’s Standards of Reading Literacy. Some schools I visited are using The Reading Comprehension Toolkit, (2008) by Stephanie Harvey and Anne Goudvis, Portsmouth, NH: Heinemann which contains the various strategies and resources of grade-level-appropriate materials for fiction and non-fiction designed according to lexile measure for K-6 grades including Teacher’s Guides. The grade-level-appropriate readers are written with the various strategy focus of reading comprehension. Daily5, Literature Circle, graphic organizers and Thinking Maps are some of the effective tools that were used by teachers to teach reading comprehension strategies. Hence, the teaching processes aim to develop students’ comprehension skills using the strategies and also teaching students the effective ways to use the strategies in groups, with a partner and independently.

- The physical environment in class is conducive for cooperative, collaborative and independent learning. The Language and Arts classrooms are equipped with displays of both commercially produced and teachers’ prepared charts and posters on comprehension strategies, reading checklists, rubrics, student works and other teaching
materials such as big books and small readers. Teachers use the appropriate graphic organizers for group and individual student work.

- **Teacher observations, questioning and feedback** are the commonly used formative assessment tools for comprehension instruction by the teachers. Besides the ‘paper-and-pencil’ methods of Reading Assessments, ‘Non-traditional Testing’ methods are also conducted by the teachers. They are:
  - *Non-verbal Assessment Strategies*, e.g. physical demonstration (Total Physical Response-TPR), pictorial products;
  - *Performance Assessment Strategies*, e.g. role plays, strip stories; and
  - *Portfolio Assessment Strategies*, e.g. journal writings, audio/video recordings, checklists.

- Professional Development Coordinators from the College of Education, Maryland University provide pre-service teacher training on Reading Instruction to the interns who are undergraduate students. The appointed Reading Specialists in schools who are experienced teachers provide training on reading programs, teaching strategies and assessment practices to the teachers in schools. The County’s Education Department cascades the training to the teachers through Reading Specialists in the schools. Reading Specialists also conduct reading workshops for students to enhance their skills.

**Learning Experiences**

Besides the above key observations, I gained learning experiences from the courses I attended, discussion with academic experts and visiting educational institutions.

- I was given the opportunity to audit 2 courses at University of Maryland conducted by two eminent professors. Professor Peter Afflerbach who is an expert in Reading Assessment and Professor Jennifer Turner on the topic Qualitative Research for Education. They both were exemplary models in the way they lead and facilitate discussion with their students. Both the courses further deepened my knowledge about assessment practices and research designs.
• University of Maryland faculty mentor Dr Roberta Lavine guided me to refine the project proposal and provided relevant resources for the project. Dr James Greenberg, Dr Lea Ann Christenson and Dr Jennifer Turner were the academic experts who provided professional inputs to enhance the project procedure.

• I had the opportunity to share on Reading Instruction in Singapore to the undergraduate student teachers and on a brief introduction of Singapore Education System to the PhD students in College of Education. This gave me the exposure to interact with the graduate students. They were excited and enthused to know about Singapore and its Education System. The undergraduate students gave the feedback that they learnt new strategies from my sharing on Reading Instruction in Singapore which were on Shared Book Approach (SBA), Modified Language Experience Approach (MLEA) and Learning Centres (LCs).

• I observed an effective reading comprehension lesson conducted by a reading specialist in the school where I was placed. It was an exemplary lesson which could be a model to beginning and inexperienced reading teachers. I saw evidence that reading comprehension theories were put into practice in the model lesson.

• I participated in the weekly seminars conducted by the College of Education personnel that provided the opportunities for me to discuss and share about my capstone project with fellow Fulbright teachers. In addition, feedback received from faculty members during the seminar and the Guest Talks on different topics such as Multicultural Learning, Clickers for Student Engagement and Learning were definite pluses to the study. There were visits arranged for Fulbright Teachers as a group to visit schools with special education programs. I also visited Middle and High schools in a different County in Maryland and a High School in Brooklyn, New York City during the educational trips. These school visits provided awareness of a different school system.

• I attended the Second Language Research Forum 2010 (SLRF2010) held at the University of Maryland in October, from 14-17, 2010. The SLRF2010 was held with the theme ‘Dimensions and Directions’. It provided a venue for scholars and graduate students from different countries to meet, present their research, discuss their findings, exchange and develop new ideas on second language education. This year’s
conference brought together theory and research methodology from various disciplines that deepened my understanding of Second Language Acquisition and its applications to real-world needs. I also attended the WATESOL 2010 Convention held at the University of Maryland on Nov 13, 2010. The keynote address and the concurrent sessions of the convention provided me the insightful tips on teaching and learning of reading comprehension related to my capstone project.

- I visited Harvard University, Boston for a study trip accompanied by a few other Fulbright Teachers on Nov 30, 2010. The first meeting was with Dr Terry K Aladjem, Interim Director of the Derek Bok Center for Teaching and Learning located at the Science Centre, Harvard University. The purpose of the meeting is to learn about professional development program of the Center. The Bok Center’s programs, which can be divided into five broad categories: Resources, Services, Publications, Research and Outreach. The Bok Center offers and encourages use of a broad variety of feedback techniques, so that teachers can reflect on their own teaching as first step toward improvement. The Bok Center’s brochure provides some useful tips which I can refer to for the Professional Development Program of the Language Centre where I am attached to in my home country. The next meeting was with Dr Howard Gardner, the Guru of Multiple Intelligences (MI). The meeting was held at his office which is at the Harvard Graduate School of Education where he spared a short time with us in the midst of his busy schedule. During the discussion, Dr Gardner, Professor of cognition and education, briefly explained the rationale and relationship of MI with some other teaching and learning approaches, for example, Differentiated Instruction. As an education officer, it is an honor that I met Dr Gardner and I will cherish the valuable moments spent with him.

**RELEVANCE TO MY HOME COUNTRY**

During the stint in Maryland, US, I gained enriching and valuable learning experiences and knowledge through various ways. To transfer my learning and apply what is relevant to the Singapore context (in the case of mother tongue language teaching and learning), I conceptualised a framework for teaching of reading comprehension comprising key
aspects. The framework is aligned with the PETALS\textsuperscript{TM} (CPDD, Singapore: 2006) Framework for Engaged Learning.

**PETALS\textsuperscript{TM} (CPDD, Singapore: 2006) Framework for Engaged Learning**

Launched in 2005 by the Minister for Education Dr Ng Eng Hen, *Teach Less, Learn More* (TLLM) marked a new milestone in learning and teaching in Singapore. The movement was a call to Singapore schools to focus on teaching better, to engage our learners and prepare them for life, rather than teaching more, for tests and examinations. TLLM aims to touch the hearts and engage the minds of learners, to prepare them for life. It reaches into the core of education – *why we teach, what we teach and how we teach*. In line with TLLM, to support teachers in understanding the dynamics between what a student experiences and what a teacher does, and to provide a common language and professional vocabulary across all Singapore schools, the PETALS\textsuperscript{TM} Framework was developed and disseminated to all schools in 2006. There are five dimensions of learning and teaching which contribute to engaged learning in the Singapore classroom. The framework is a synthesis of teachers' experiences, students' feedback, researchers' data and sound education theories.
Each dimension of the PETALS™ framework guides the teacher to think about how and what he/she can provide to engage learners in the classrooms. Interactively, all five dimensions can be used to guide teachers in their planning to help realize **Student-centeredness** in the learning process. In short, students are engaged when teachers:

- select **Pedagogy** that considers students’ readiness to learn and their learning styles;
- design an **Experience of Learning** that stretches thinking, promotes interconnectedness and develops independent learning;
- create a **Tone of Environment** that is safe, stimulating and which engenders trust;
- adopt **Assessment** practices that provide information on how well students have performed and provide timely feedback to improve learning; and
- select relevant and meaningful **Learning Content** that makes learning authentic for the students.

**CONCEPTUAL FRAMEWORK FOR TEACHING OF READING COMPREHENSION IN LANGUAGE**
The **Student-centred** Reading Comprehension Teaching framework consists of 3 key aspects: **Teaching strategies**, **Integration of Formative Assessment** and **Teaching Procedure** which are interconnected with **Content**, Comprehension **Skills** and **Values**.

The important **Teaching Strategies** of reading comprehension are:

1. **Activating prior knowledge**: When students activate their prior knowledge, they are able to connect with what they already know. This gives them a base on which to build further knowledge. For new learners and struggling readers, it is especially important to spend time building their prior knowledge to give them a ‘head start’ to comprehending the text. This could be content or vocabulary knowledge or a combination of both.

2. **Self-monitoring**: Self-monitoring supports comprehension by giving the students control over the reading process. Before reading they might clarify their purpose for reading and preview the text. During reading, they monitor their understanding, perhaps adjusting their reading speed to the difficulty level of the text and using the ‘fix-up’ strategies to deal with any comprehension problems they may have. After reading, they can monitor their understanding of what they have read.

3. **Predicting**: Predicting is a key for pre-reading strategy as it helps to set a purpose for reading. Continuing to make predictions and confirming or revising them throughout the reading process encourages students to become active readers who have expectations of the text. This also keeps them actively engaged in the reading process. This engagement is crucial for comprehension. By thinking about their predictions and confirming or revising them, students remain motivated and focused.

4. **Questioning**: Asking and answering questions helps to encourage the reader with the text. It provides a purpose for reading and gives the students a reason to clarify meaning. This connection helps to deepen comprehension.

5. **Making Connections**: Making meaningful connections helps students relate the text to their own prior knowledge. The more connections, the more likely the student is to comprehend the text. For example, if a student is reading a book about snorkeling and they have had that experience, they are more likely to make meaningful
connections than a person who has not had that same experience. Making connections helps to deepen comprehension and create personal links with what is being read. These connections impact on a student’s motivation to read.

6. **Visualizing**: Visualizing supports comprehension as students create their own mental images of what they are reading. By doing this, they feel more connected to the story, enjoy the story more and understand it more deeply.

7. **Inferring**: Students develop a deeper understanding of the text when they ‘read between the lines’ to draw their own conclusions by using prior experience. They create their own unique meaning of the text. As they read, these understandings may be revised as the reader is exposed to new information.

8. **Summarizing**: In order to summarize, the students must attend closely to the text and be able to include information that gives the essence of the text. Summarizing also plays a part in the ability to synthesize – if the students are able to articulate the main points and ideas of a text, they are more ready to synthesize.

9. **Synthesizing**: Synthesizing supports reading comprehension because it requires students to combine their prior knowledge with new knowledge and put it into their own words. This creates ownership of the thinking. This can be a powerful experience that makes it more likely that the student will remember the information and transfer it to new situations, which will help to further reinforce their new thinking.

The strategies taught with the integration of **Formative Assessment** key tools which are:

- **Teacher Observations**
  - Use of Checklists
  - Rubrics
- **Questioning Techniques**
- **Providing Quality Feedback**
The strategies and the integration of formative assessment tools are intended to enhance the following Comprehension Skills:

- Story Structure
- Sequence of Events
- Main Idea/Details
- Noting Details
- Identifying Character Traits
- Compare and Contrast
- Categorize and Classify
- Fact and Opinion
- Cause and Effect
- Fantasy and Reality
- Drawing Conclusions
- Making Judgments
- Identifying Text Features
- Organizational Text Structure
- Vocabulary Development

Hence, students are to be exposed to a variety of Text types such as,

- picture-books (sophisticated picture books for older students)
- short stories
- folk stories or fairy tales
- myths and legends (including some appropriate to the cultures of diverse students)
- novels
- poetry
- biographies and autobiographies
- letters to the editor, magazine articles, etc.
- excerpts from books for different purposes, e.g. to show how an author engages the reader at the start of a story or to highlight an author’s style.
- published work written by the students in class
- Digital texts

The Teaching Procedure for reading comprehension is designed using the ‘3Es1A’ lesson model incorporating PETALS™ framework for engaged learning.

Entry – 10% of the lesson duration creates a need to learn and helps students develop background experiences and use prior knowledge to connect to the lesson. Examples of suggested activities are trigger, tuning-in, and recapitulate.
**Explain** – 20% of the lesson duration creates an understanding of concepts/skills by telling students what they are going to learn, why they are learning it, and then teaching them by demonstration or/and lecture.

**Exercise** – 30% of the lesson duration simulates for deeper insight and feel that often occurs during the teaching as students practise what they are learning by seat work, board work, quiz, etc., while the teacher checks for understanding and monitors and adjusts instruction.

**Apply** – 40% of the lesson duration provides opportunities for students to practice what they learned through internalization and transfer of learning to real life situations by involving in non-routine activities, projects with peers or working independently.

Knowledge and skills must be underpinned by values. We, in Singapore prepare our students with the knowledge, skills and **values** to face challenges in the future. Values, the key traits and dispositions such as responsibility, cooperation, confidence and curiosity could be inculcated in students while learning.

**Responsibility:** Students should take responsibility for their own learning and fulfill responsibilities with love and commitment.

**Cooperation:** Cooperation, in essence, means being able to work well with others. In the context of the 21st century, what is important is that children are able to respect differences, socialize, be resourceful, build relationships and build on the ideas of others. A child who is cooperative is able to empathize and may even be inspired to help others succeed. Its relevance to future needs lies in the fact that such a child understands that he can play different roles in a given situation, is constructive and works towards a common goal. He knows that he can win without someone else losing and is tenacious enough able to deal with conflicts and negotiate with others, using good communication and people skills, to reach his goals. *This construct also encompasses the idea of a child having character, and a sense of belonging and rootedness to his community and nation.*

**Confidence:** Confidence comprises a certain sense of assurance and boldness arising from reliance on oneself or one’s circumstances. It basically stems from having strong communication skills, basic competencies and self awareness. An extended meaning of
confidence includes having a “voice”, being able to defend a position and daring to challenge assumptions. Its relevance to future needs lies in the fact that a child who is confident *speaks with impact*, is able to deal with ambiguity, unpredictability and uncertainty, accept differences in opinions, acknowledge his own mistakes and shortcomings, and is poised to make a difference.

**Curiosity:** Curiosity fundamentally connotes a desire to learn and a sense of wonder that moves a child to ask questions, and interact with and explore his environment using a range of senses. Its relevance to future needs lies in the fact that a child who is curious will also be inquiring and inventive, prone to pushing limits, takes risk, and is able to problem-solve using different means. Curiosity, when fuelled by passion, will enable a child to persevere in a certain field.

The values will help students’ self-directed and collaborative learning skills.

<table>
<thead>
<tr>
<th>Self-Directed Learning</th>
<th>Collaborative Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ownership of learning</td>
<td>• Effective group processes</td>
</tr>
<tr>
<td>• Management and monitoring of own learning</td>
<td>• Individual and group accountability for learning</td>
</tr>
<tr>
<td>• Extension of own learning</td>
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</tbody>
</table>

**Professional Development Training for Teachers**

Professional Development is a key driver of excellence in any school. One essential quality of the literacy leader is having knowledge of a broad cross-section of teaching techniques and strategies, a collection of ideas that can be orchestrated to adjust and modify the core program to meet their students’ needs (Applegate, A.J. et al., 2010). Hence, for the effective teaching of reading comprehension, teacher training is critical.

As a Master Teacher in my home country, one of my responsibilities is to provide professional development training to teachers teaching in primary schools. The conceptual framework for the teaching of reading comprehension strategies is used to design the outline for the training. The training will be conducted in 2 sessions. Each session will last
3 hours. To facilitate the training sessions, resources such as checklists for reading assessment, sample lesson plan/template and graphic organizers will be prepared (refer to Appendix for the training outline, sample lesson plan and checklists). During the training sessions teachers in groups will design lesson plans based on the framework for reading comprehension in language teaching. The designed lesson plans with various strategy focuses will be uploaded onto the online teaching and learning Portal for Singapore Teachers www.edumall.sg for sharing. Teachers can use them to conduct lessons and post their feedback online stating the strengths and areas for improvement. Teachers who participated in the training sessions can form Professional Learning Communities (PLCs) and meet on a regular basis to discuss the strengths and areas for improvements of the lessons that they have conducted in their class. The lessons will be refined further. They will be conducted by the teachers in the PLCs. The PLCs can also look into the appropriate integration of ICT into the lessons. The selected lessons will be video recorded and uploaded onto the Portal for sharing with the other teachers. This will ensure the effective implementation of the reading comprehension strategies and the integration of formative assessments in language teaching and the monitoring of the Professional Development.

**CONCLUSION**

This report is solely based on my learning experiences, observations, interviews and readings which were carried out during the four months stint in Maryland, USA in the capacity of a Distinguished Fulbright Teacher. The limited resources that I collated within a short duration provided qualitative data that helped to find the responses to the research questions to a certain extent. The final products of my capstone project that are the written report, the conceptual framework for the teaching of reading comprehension and the outline of professional development training have meaning which are of relevance in the fulfilment of my professional tasks. The goal of my professional development is to help teachers in my home country to make meaning of new constructs and experiences to determine its impact on education, including pedagogy, knowledge and assessment. Such
learning experiences will change my teachers' pedagogical and assessment practices in that they are better prepared to integrate their learning to enhance students' learning.

ACKNOWLEDGEMENT

I would like to thank the following for the wonderful learning experiences I gained and for the guidance for the accomplishment of my capstone project:

- Ministry of Education (MOE), Singapore
- Academy for Educational Development (AED), Washington DC, USA
- College of Education, University of Maryland, College Park, USA
- Dr James Greenberg, Director of International Initiatives, College of Education, University of Maryland (UMD)
- Dr Roberta Lavine, Faculty mentor, College of Education, UMD
- Dr Peter Afflerbach, Professor, College of Education, UMD
- Dr Jennifer Turner, Professor, College of Education, UMD
- Dr Lea Ann Christenson, Professional Development School Coordinator, College of Education, UMD
- Letitia William, International Initiatives Coordinator, College of Education, UMD
- Principal, Vice, Principal, ESOL Teacher and Reading Specialist of the Elementary School I was placed and all the other schools I visited
- All those who have helped in one way or another
PROJECT: AN INQUIRY INTO READING COMPREHENSION STRATEGIES AND THE INTEGRATION OF FORMATIVE ASSESSMENT

REFERENCES


Cameron, Sheena (2010). *Teaching Reading Comprehension Strategies*, Person Education, Auckland, NZ.


SAMPLE LESSON PLAN based on PETALS™ Framework for Engaged Learning

Subject: Tamil Language  
Topic: Reading Comprehension  
Level: P5  
Amount of Curriculum Time: 3 periods (90 minutes)

Lesson Objectives:

Students will
- apply the new vocabulary words used in the text in a different context
- formulate questions using 5W1H for the text
- construct brief responses to the given questions

Strategies: Monitor/Clarify, Making connection and Questioning

Learning Content (meaningful and relevant)

Age-level-appropriate narrative text  
Knowledge
- Vocabulary words
- Comprehend the text read
- Use the contents discussed to answer questions with understanding  
Skills
- Sequence the events
- Identify character traits  
Values
- Cooperate with others and contribute during group work
- Being confident in asking questions and responding

Entry – 10% (Tuning in): [P], [E], [T]

- Teacher provides ‘Story Strips’ of the text; Students rearrange the strips of the story according to the events within the given duration. Then each group has to rotate visiting other groups to monitor/clarify their own group work
- Teacher connects students prior knowledge to the text and provides background information about the text for further understanding

Group Work  
Teacher observation[FA]

Explanation – 20% (Understanding of concepts): [P], [E], [T]

- Teacher reads aloud the text once; Students read the text individually and indicate the new vocabulary words and any other words which prevent them from understanding the text using post-its and stick them on a flip chart; Students should avoid repeating the same words if others have already indicated them

Teacher observation, questioning and feedback. [FA]
- Students discuss in groups to find the meaning of the vocabulary words using the contextual clues of the text; They then construct sentences using the words in different context and share in class; Teacher checks for the appropriate use of the words in sentence; gives feedback and corrects if necessary.
- Teacher asks probing questions of the text to the class to check on students’ understanding of the whole text

| Exercise – 30% (Student learning and Teacher monitoring): |
| [P], [E], [T] |
| Activity 1 (Formulating questions) |
| Teacher divides students into groups and allocates different paragraphs of the text to each group. Each group to formulate 5W1H questions within the given duration. |
| Then each group has to ask the formulated questions to another group to get their responses with Teacher facilitation. |
| Teacher reinforces the importance of phrasing the responses according to the questions’ needs |

Activity 2 (Character traits)
- Teacher writes the name of the characters on the board and students from each group to choose the words from the given trait list and write their response against each character.
- Teacher encourages other groups to provide feedback first before giving her feedback

| Application – 40% (Student’s independent/collaborative work): |
| [P], [E], [T] |
| Students write their responses to the questions found in the activity sheet independently. |
| Students write simple sentences using the given vocabulary words in the activity sheet independently. |

*Pedagogy [P]*
Student readiness, existing knowledge, learning styles
(Readiness – Engagement - Mastery)

*Experiences [E]*
Seeing connections, Stretching thinking, Independent learning

*Tone of Environment [T]*
Emotionally safe, Stimulating, Purposeful

*Assessment*
Formative [FA], Summative [SA]
**WORKSHOP OUTLINE (TENTATIVE)**

**TEACHING OF READING COMPREHENSION AND INTEGRATION OF FORMATIVE ASSESSMENT FOR PRIMARY SCHOOL TL TEACHERS**

**Session 1 (3 hours)**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Duration</th>
<th>Program</th>
<th>Resources</th>
</tr>
</thead>
</table>
| **Entry** | 10 min   | Ice-Breaker activity connected to workshop goal e.g.  
- Participants read a complex text and list the strategies they used to comprehend the text  
- They share the strategies in groups; compile them and share in class | worksheets |
| **Explain** | 30 min   | Trainer explains the importance of teaching of strategies in reading comprehension and the key skills of reading comprehension supported with literature readings  
- Trainer explains the important strategies with examples  
- **Hands-on (Part 1)**  
Participants in groups focus on certain strategies and discuss how they could be taught to develop student’s comprehension skills. Each group shares the key points discussed in the class | ppt presentation |
| **Exercise** | 30 min   | **Hands-on (Part 2)**  
Participants in groups discuss about the various | stationery |
| **20min** | Break (Refreshment) | Break (Refreshment) | |
| **Explain** | 30 min   | Trainer explains the rationale for the integration of Formative Assessment and the key tools of FA in the teaching of reading comprehension | ppt presentation |
| **Exercise** | 30 min   | **Hand-on (Part 2)**  
Participants in groups discuss about the various | stationery |
**Session 2 (3 hours)**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Duration</th>
<th>Program</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td>10 min</td>
<td>• Jigsaw exercise on the conceptual framework for the teaching of reading comprehension. This exercise is intended to recapitulate session 1 learning. <strong>Hands-on (Part 3)</strong>&lt;br&gt;- Participants will be in groups. Each group will be provided with Jigsaw pieces of the key points and the topics of the different aspects of the framework&lt;br&gt;- Participants are to join the pieces and match the key points to the different aspects of the framework</td>
<td>Jigsaw pieces of the key point and the aspects of the framework and stationery</td>
</tr>
<tr>
<td>Explain</td>
<td>20 min</td>
<td>• Trainer explains the conceptual framework for the teaching of reading comprehension and Sample Lesson Plan&lt;br&gt;• Participants to select resources for preparing lesson plan such as strategy focus, text type, skills, values, graphic organizers, ICT support.</td>
<td>Ppt presentation</td>
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<tr>
<td>Exercise</td>
<td>15 min</td>
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<tr>
<td></td>
<td>20 min</td>
<td>Break (Refreshment)</td>
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<tr>
<td>Apply</td>
<td>45 min</td>
<td>Hands-on (Part 4): Group work on designing of sample lessons</td>
<td>Stationery and lesson templates</td>
</tr>
<tr>
<td>Apply</td>
<td>45 min</td>
<td>Group presentations and lesson critique session</td>
<td>Ppt presentation</td>
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<td>10 min</td>
<td>Q &amp; A</td>
<td>Post-it note</td>
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<td>10 min</td>
<td>Feedback</td>
<td>Writing forms</td>
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<td></td>
<td>5 min</td>
<td>Closure</td>
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**CHECKLIST FOR TEACHER’S SELF-ASSESSMENT (SAMPLE)**

**Teaching of Reading Comprehension and Integration of formative assessment**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Connecting students’ prior knowledge, readiness and interests with learning goals</td>
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<tr>
<td>2.</td>
<td>Using a variety of instructional strategies and resources to respond to students’ diverse needs.</td>
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<td>3.</td>
<td>Engaging students in problem solving, critical thinking and other activities that make subject matter meaningful to them</td>
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<tr>
<td>4.</td>
<td>Promoting students’ self-directed, reflective and cooperative/collaborative learning</td>
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<tr>
<td>5.</td>
<td>Creating a conducive physical environment that engages all students</td>
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<tr>
<td>6.</td>
<td>Using appropriate materials, resources and technologies to make subject matter accessible to students.</td>
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<td>7.</td>
<td>Sequencing instructional activities and materials for student learning.</td>
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<tr>
<td>9.</td>
<td>Guiding students in assessing their own learning</td>
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<tr>
<td>10.</td>
<td>Providing opportunities for students to demonstrate desired values during learning</td>
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</table>
BDA Checklist for Students (sample)

**BEFORE READING**

- I think about the cover, title, and what I know about the topic (my prior knowledge)
- I skim, looking at and thinking about illustrations, photos, graphs, and charts.
- I read headings and captions.
- I read the back cover and/or print on the inside of the jacket.
- I use the five-finger method to see if the book is just right for me.
- I set a purpose or goal for my reading of the text
- I ask questions.
- I make predictions.

**DURING READING**

- I make mental pictures
- I identify confusing parts and reread them
- I use pictures, graphs, and charts to understand confusing parts.
- I identify unfamiliar words and use context clues to figure out their meanings.
- I stop and retell to see what I remember. If necessary, I reread.
- I predict and adjust or confirm.
- I raise questions and read on to discover answers.
- I jot down a tough word and the page it is on and ask for help.
**AFTER READING**

- I think about the characters, settings, events, or new information.
- I discuss or write my reactions.
- I reread parts I enjoy.
- I skim to find details.
- I reread to find support for answering questions.

Acknowledgment: [http://www.boobis.com/students/rdingchecklist.html](http://www.boobis.com/students/rdingchecklist.html)