

The effects of the explicit teaching of the inference skill on answering inferential questions in narrative texts

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Abstract

This action research examined the effects of the explicit teaching of the inference skill in helping Primary 6 students in a Singapore school to answer inferential questions in narrative texts better. In particular, this study explored the use of an approach suggested by Harvey and Goudvis (2007) to develop the inference skill. A series of lessons were crafted to teach this essential comprehension skill. The lessons were layered on top of each other, gradually focusing the students' skill of inference from pictorial to authentic familiar short texts to reading full comprehension test texts.

Introduction

Background Information

This action research first started as a classroom inquiry in 2016 investigating how annotations helped the students in understanding comprehension narrative texts better. Being part of the Special Interest Group (SIG) *Comprehension@ELIS* at this juncture helped clarify doubts, thus enabling plans to be put into action. The importance of annotation was shared with the students. Porter-O'Donnell (2004) suggested that students be given a bookmark each that detailed ideas for symbols to use in annotation and the types of comments they could make. Thus, a set of teacher-designed guidelines for the annotation of narrative texts was carefully crafted (see Figure A1 in the Appendix). This set of guidelines, which was made into a bookmark, was to help guide the students as they made their thinking visible. A second bookmark, which was a set of annotation symbols, was designed so that there was a common understanding among the students and the teacher (see Figure A2 in the Appendix). This set of symbols was to be used as a guide as the students began their journey in annotating texts. The students were strongly encouraged to use these symbols until they were able to establish their own preferred annotation styles and modes over time. The teaching of annotation, using the teacher-modelling approach based on the teacher-designed guidelines, was then systematically carried out over a couple of weeks.

However, the focus on annotation was conceptualised based on the belief that the students had already acquired the necessary comprehension skills such as summarising, inferring, making connections, decoding and asking questions. At the end of the first semester in 2016, it was observed that many of the students were struggling with how and what to annotate. The students annotated very little in the comprehension passages in their weekly assignments and the one set in *Semestral Assessment 1 2016*. They hardly made reference to the bookmarks as well. As the discussions at the *Comprehension@ELIS* SIG with fellow STs, LTs and MTT deepened, it became clearer that whilst the benefits of annotations were many, it was the thinking behind the act of annotating that was crucial in comprehending a text. The set of guidelines for annotation had to be unpacked for the students as

it covered many comprehension skills. In other words, before the students were able to make their thinking visible through annotation, they needed to possess the necessary comprehension skills to do so. Mini-lessons focused on such skills and had to be taught to the students in order for them to make meaningful annotations. As a result, the focus of the classroom inquiry shifted from studying the effects of annotations on comprehending narrative texts to the explicit teaching of comprehension skills. This new focus of study began in January 2017 and that was the start of the collaboration with ELIS.

There are many comprehension skills to be taught. It would be foolhardy to attempt to address all comprehension skills at one time. After careful examination of the students' work and examination scripts, it was observed that the students had problems with answering inference questions in comprehension passages. Thus, the comprehension skill to focus on with the students was then decided to be the inference skill.

Literature Review

Why the focus on the inference skill?

Authors usually have a bigger message or truth such as a life lesson or moral hidden in their stories. Authors help their readers figure out that important message by leaving clues in the stories for them to locate, and amass and then draw conclusions for themselves. Finding these messages or truths is one of the reasons people read. If students are taught this skill, they will be more engaged. It will also deepen their understanding of the text, bringing more meaning to their reading. In the words of Zimmermann and Hutchins (2003), 'by using inference, you elaborate upon what you read, drawing conclusions, going beyond what is written on the page...You personalise what you read to build a deeper meaning' (p. 97). Moreover, inference questions are asked in the Comprehension component of the students' English Language examinations. Thus, as a by-product of the acquisition of this skill, the students would be better equipped to answer such questions.

The skill for drawing out the bigger message an author has for readers is known as the *inference skill*. According to Harvey and Goudvis (2007) 'inferring involves merging background knowledge with text clues to come up with an idea that is not explicitly stated in the text. Inferring is the proverbial reading between the lines' (p. 131). In this study, an inferring equation, suggested in Harvey and Goudvis (2007), was expounded and explicitly taught (see Figure A3 in the Appendix). It was designed as a bookmark so that the students could use it in class and reference it with ease.

The importance of explicit teaching

Traditional comprehension lessons used to involve getting the students to pronounce the words in the passage correctly, retell the gist of the story and, most importantly, answer the questions that followed the passage. However, Zimmermann and Hutchins (2003) stated that 'real comprehension has to do with thinking, learning and expanding a reader's knowledge and horizons' (p. 7). Research in reading comprehension has surfaced the reading skills that proficient readers use to understand what they read. According to Zimmermann and Hutchins (2003), there were seven keys to proficient reading: create mental images, use background knowledge, ask questions, make inferences, determine the most important ideas or themes, synthesize information and use fix-up strategies. The question now is: Can students be taught to acquire these reading or comprehension skills and processes used by proficient readers? According to Duke and Pearson (2002), the answer to this question was a 'resounding yes' (p. 206). In fact, research had shown that teaching even one comprehension skill could improve students' comprehension.

In short, it is essential that students are equipped with these comprehension skills so that they are better able to make sense of what they are reading. The next question is: How do teachers help students to acquire these skills? Harvey and Goudvis (2007) stated that a mass of research studies has been carried out to prove beyond doubt that ‘*explicit* comprehension instruction improves students’ understanding of texts they read in school’ (p. 23). That is to say, teachers have to try to make what is implicit explicit. Explicit instruction entails teachers describing to students what a particular comprehension skill is and when and how to use it. In addition, time must be given to the students to practise what they have been taught. This instructional approach is known as the Gradual Release of Responsibility model (Fisher & Frey, 2008).

Instructional Approach – Gradual Release of Responsibility

The Gradual Release of Responsibility (GRR) model (Fisher & Frey, 2008) of instruction was adopted for this study. This model of instruction recommends that learning should shift slowly from teacher-as-model, to joint responsibility, to collaborative learning and then to independent application by the learner. Eventually, the goal is for all students to be independent learners. This instructional model is intentional, purposeful and explicit. It is through this very purposeful classroom structure that learning occurs (Fisher & Frey, 2008). In brief, rather than tell students *what* to do, show them *how* to do it. The importance of modelling by the teacher and giving students enough time to practise what they have been taught cannot be stressed enough.

Lessons for this study were carried out with this instructional model in mind, from the teacher modelling the skill (I Do) to the teacher doing activities with the students (We Do) to the students trying things with their peers (You Do It Together) to the students doing independent work (You Do It Alone).

Do texts/passages matter?

Oczkus (2009) recommended using good ‘mentor texts’ to demonstrate the various comprehension skills. According to Oczkus (2009), mentor texts were special literature that teachers referred to time and again for different purposes. For example, in reading lessons, mentor texts ‘provide multiple opportunities to introduce, model, and practice the power of reading comprehension strategies’ (p. 42). Essentially, the role of a mentor text is to help the teacher bring out the essence of a comprehension skill. In fact, Harvey and Goudvis (2007) suggested that a series of strong mentor texts that go well with each comprehension skill be used to teach that particular skill. These texts could include short or long passages, picture books, magazines, newspaper articles and so on, as long as they gave the opportunity for teachers to model a particular comprehension skill clearly and effectively. In short, the choice of texts matters. Whether students are actively engaged in their reading depends on how authentic, interesting and engaging the texts are.

In this study, a variety of texts were carefully selected and crafted for the teaching of the inference skill. The texts included pictures, photographs, student-generated texts, picture books, familiar short and long comprehension passages as well as unfamiliar short and long passages.

Methodology

Samples

The subjects for this study were a class of 38 middle to high ability Primary 6 students. They had the same English teacher for two years: 2016 and 2017. This study comprised about 14 lessons taught over three terms in 2017. As there was only one principal investigator, time was needed to collect

data after each lesson, analyse it and subsequently create, or make changes to, teaching resources for use in the following lessons. Thus, it took about three terms to complete the study.

Intervention

This study tried to heighten the awareness and use of the inference equation suggested in Harvey and Goudvis (2007) among the students through a series of lessons that were layered upon each other, moving from pictorial to authentic texts to short familiar texts and finally to long unfamiliar texts. The sequence in which each lesson was carried out was crucial in this study. For each lesson, the GRR instructional approach was employed. The methodology of this study is summarised in a graphic representation as shown below (Figure 1). The series of lessons involving the sequence of types of texts is detailed in the following section.

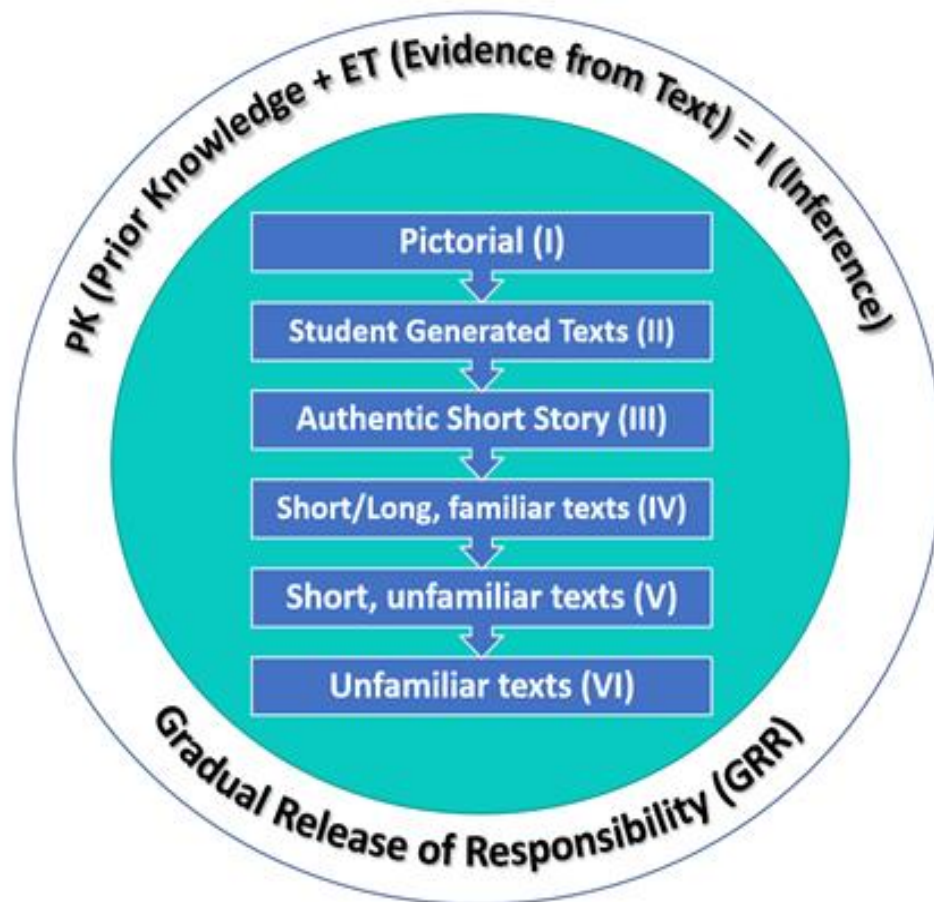


Figure 1: Summary illustration of the methodology used in the study.

(I) Pictorial texts

To ease the students into developing the acquisition of the inference skill, pictures and photographs were used to kick-start the series of focused lessons. They were sourced from the Internet and particularly selected as they gave room for inference. Reasons for using pictorial resources were to:

(1) *not put the students off at the very start*

Pictures and photographs were less intimidating than actual comprehension texts.

(2) *let the students know that the inference skill is an everyday skill that all of them use to make sense of things around them*

This was because the pictures and photographs featured everyday scenarios which the students could identify themselves with.

(3) introduce the inferring equation

With such images that could be *read* by students of different abilities, the focus could then be channelled to the teaching and usage of the inferring equation. The students were then less likely to be distracted compared to when the words of a text-only text would cause them to be.

Due to the fact that an equation was used in this study, students were taught to jot down the inferences that they had come up with in a table format (Figure 2). However, they were encouraged to fill in the '(I)' (Inference) of the equation first before proceeding to fill in the '(PK)' (Prior Knowledge) and '(ET)' (Evidence from the Text). That is to say, they were asked to fill in the table from right to left.



Prior Knowledge (PK)	+	Evidence from Text (ET)	=	Inference (I)
seen it in books / on TV	+	fin at the centre of the back/tail /flipper	=	Dolphin

Figure 2: 'Complete the picture' activity with a pictorial text.

Initially, the students did not understand that the answer to the inference question constituted the '(I)' of the equation. Therefore, they had to jot that down first. They had difficulty understanding the logic of filling in the table from right to left as they were used to handling mathematical equations which were read from left to right. However, they picked it up fast after seeing a few demonstrations by the teacher and, by the next lesson, they were able to handle the table format well.

(II) Student-generated texts

Building on from the first lesson, the students were asked to write a short story on what could have happened before, during and after the photographs were taken. This was done after a short demonstration by the teacher. The students did this activity as pair work. This task was conceived with the ability of this class in mind so as to intellectually challenge them to go a step further. The students did rise to the occasion. They managed to come up with short stories revolving around the photographs that they were assigned. These stories were then collected and read by the teacher, who corrected inaccurate grammar and sentence structures, but kept the content of the stories as close to their original as possible. As these authentic student-generated stories were self-contained and easily read and understood, they provided a perfect opportunity for the teaching of the inference skill. Thus, inference questions for each story were formulated by the teacher. These stories and the accompanying inference questions were then compiled into an A5 booklet (Figure 3) and printed for the students. In pairs, they were tasked to answer the questions that followed each story, bearing in mind the use of the inference equation. They had to pen down the evidence from the text (ET) and their prior knowledge (PK) for each inference that they had come up with.

It is worth mentioning that the students were observed as being able to use the inference equation (in table format) correctly from this lesson forward. It finally dawned upon them that the answers to

the inference questions were actually their inferences, which needed to be placed after the 'equal' sign. Then they had to look for supporting evidence from the text to support their answers.

As mentioned earlier, the choice of text is important in the teaching of comprehension skills. In this case, the texts used were short and authentic as the students themselves had crafted them. The

<p>"Oh my! There are no more baskets and trolleys..."</p> <p>"Luckily, my jacket has a gigantic pocket!" exclaimed John as he walked confidently to the drinks section, grabbed a bottle of grape juice and put it into his pocket. With his hands free, he looked around for more drinks. Unable to find any other drinks that he liked, he walked to the cashier to pay for his juice.</p> <p style="text-align: right;"><i>Authors: Student A & B</i></p>	<p>Q) Where do you think the writer was?</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 33%;">Prior Knowledge (PK)</th> <th style="width: 33%;">Evidence from Text (ET)</th> <th style="width: 33%;">Inference (I)</th> </tr> </thead> <tbody> <tr> <td><i>Supermarkets have baskets and trolleys and a drink section.</i></td> <td><i>There were no more baskets and trolleys and there was a drink section.</i></td> <td><i>In a supermarket</i></td> </tr> </tbody> </table>	Prior Knowledge (PK)	Evidence from Text (ET)	Inference (I)	<i>Supermarkets have baskets and trolleys and a drink section.</i>	<i>There were no more baskets and trolleys and there was a drink section.</i>	<i>In a supermarket</i>
Prior Knowledge (PK)	Evidence from Text (ET)	Inference (I)					
<i>Supermarkets have baskets and trolleys and a drink section.</i>	<i>There were no more baskets and trolleys and there was a drink section.</i>	<i>In a supermarket</i>					

Figure 3: An example of a student-generated text.

students were seen to be more interested and engaged as they studied their own creations to answer the inference question that had been asked. It appeared that there was a sense of ownership and pride felt amongst the students. It was an eye-opener for them to see how teachers craft inference questions. They were more aware of the choice of words used in the text that could serve as evidence for the inference question asked. This particular lesson achieved two objectives. It provided a platform for the students to use their imagination and creativity to write their own stories based on the pictures and photographs discussed in the earlier lesson. There was a feeling of familiarity. It also provided an opportunity for the students to practise using the inference equation in deriving their inferences. Without the students realising it, the texts were slowly woven into the lessons.

(III) Authentic short story

According to Harvey and Goudvis (2007), 'picture books offer unique advantages when we deliver instruction. Of all literature that lends itself to reading comprehension strategy instruction, picture books top the list' (p. 66). From the previous lesson, it was observed that the students were very much involved in doing the activity that they were tasked to do. One possible reason for this was because there was a sense of ownership. They were interested in doing it. Interest is essential to comprehension. Authentic short stories such as picture books are more likely to capture the attention of students than the usual comprehension texts. Besides taking into consideration the students' motivational level, care was also put into ensuring that 'when students are first learning a comprehension strategy, they should encounter texts that do not make heavy demands in other respects, such as background knowledge, vocabulary load, or decoding' (Duke & Pearson, 2002, p. 211).

Thus, tapping on the idea of using authentic texts, a picture book that lends itself well to the teaching of the inference skill was used in the next lesson. The book was entitled 'See the Ocean' written by Estelle Condra (1994). It was read aloud to the students by the teacher. The students were pleasantly surprised to see their teacher reading a picture book to them. They were told to enjoy the story and, as they did so, to listen to how the author had described the main character in the story. Interested to know how the lesson would develop, they were attentive as the story was read out. At a crucial juncture in the story, the teacher stopped reading and asked the students for their inferences about

the main character of the story. There was a big 'a-ha' moment for all at the end of the lesson as the story unfolded, revealing that the main character of the story was actually blind. However, it was not explicitly written in the story that she was visually impaired. The students saw the pieces of evidence that were embedded in the text by the author to inform readers of this hidden fact. Introducing this powerful picture book *after* the students had been introduced to the inference equation and had practised using it was a wise move on hindsight. It gave them an insight into how authors leave clues for their readers to find so as to draw personal conclusions for themselves. The inference equation was internalised by the students after this lesson. They finally understood the terms used in the equation. They realised what 'Evidence from the Text' and 'Prior Knowledge' actually meant.

(IV) Short/Long familiar texts

As the class discussion intensified on the possible inferences one could make about 'Nellie', the main character of the story in the 'See the Ocean' text, the students re-read it to locate evidence that they had missed when the story was read out to them. From the lively discussion, the notion of *weak* and *strong* evidence was surfaced. The students' interest was piqued as to the strongest evidence in the picture book that showed that the main character was indeed blind. Examples of evidence found in the book were: (a) 'Nellie never fought with her brothers for a window seat' and (b) "'What's the colour?" asked Nellie'. At the end of the lesson, the students unanimously decided that evidence (b) was a *stronger* piece of evidence than evidence (a). The students argued that Nellie could have been an amiable child who did not like to play competitively. If Nellie were not blind, the question she would have asked her parents would likely have been 'Why is the ocean blue?' and not asked for the colour of the ocean.

Tapping on that teachable moment, the concept of strong versus weak evidence was discussed at length with the use of past comprehension passages where it was found that students were not able to cite the most appropriate evidence from the texts to support their inferences. (See Figure 4 for a student example). These past comprehension passages were edited so that only the paragraph(s) in focus were printed for the students to locate the strong evidence to support the inference they made.

P5 EL Semestral Assessment 2 2016 (Ramona)

Q1) Where do you think Ramona was? Give 2 pieces of evidence from the text that supports your answer.

- a) She was in hospital. She walked into a white-washed building.
- b) She was in hospital. She smelled a strong, antiseptic smell when she entered the building.
- c) She was in hospital. She heard someone paging for Dr Lam over the public address system.
- d) She was in hospital. She took a lift up to see her mother.

Reasons:

 a) A white-washed building could also be a HDB flat.

 d) Any building could also have lifts.

Figure 4: Student example of strong v. weak evidence from the short familiar text.

At this point, long familiar texts were also used to teach the students how to answer questions that required them to compare and contrast ideas while citing evidence from the texts to support their answers. Examples of such texts included STELLAR readers and past comprehension passages that the

students had read. Making use of known texts helped the students focus their attention on using the inference equation to answer the question instead of having to spend time comprehending the passage first.

(V) Short unfamiliar texts

After a series of lessons where the students were given opportunities to make use of the inference equation in a safe context, it was time for them to venture into 'uncharted waters' of unfamiliar texts. To scaffold their learning, the unfamiliar texts were shortened to just a few paragraphs. The chosen texts were narratives and care was taken to ensure that the content was within the students' experience. Inference questions were carefully crafted based on those paragraphs and the evidence for the inference made could be found in the shortened texts. It was at this juncture that the answering format was changed from the table format to a linear one to prepare the students for the questions that they would face in an actual examination context. The table format was used at the beginning of this study to ease the students into familiarising themselves with the inference equation. However, the students would not be given such a table to fill in their answers to the inference questions asked in an actual examination. Thus, to help the students make the connection to the actual examination question format, the answering format for these short unfamiliar texts was switched to a linear one which resembled an examination paper more closely.

(VI) Long unfamiliar texts

As the research study continued, the students were sensitised to the need for having to source for evidence from the text (ET) and making use of personal prior knowledge (PK) to help answer inference questions. Confidence was built up as the students re-visited inference questions that asked about familiar texts. Thus, when it came to tackling unfamiliar texts, the students were ready and responded positively. They had done so many exercises on it that it became almost like a routine for them. The gradual shift in texts resulted in a seamless transition from using familiar to unfamiliar texts (short and long) and had benefitted the students.

The ultimate goal of this series of lessons was to prepare the students to face a full-page unfamiliar comprehension text and be sensitive to the questions that required them to infer. It was highlighted to the students that there could be a few questions in a comprehension text that were inference questions where the answers were not written in 'black and white'. The students were made aware that inference questions may not always be the last question of a comprehension text. As long as the answer to the question could not be found explicitly printed in the text, it was an inference question.

Results

Quantitative results were difficult to gather for this research study. The reason was because the number and type of inference questions differed from one comprehension exercise to another. Thus, it was difficult to quantify the students' understanding. As such, qualitative feedback was gathered to check for the students' understanding, misconceptions and attitudes towards the explicit teaching of this particular skill. The first feedback was gathered at the midway point of this study. A series of purposeful questions were asked to check for the students' understanding of the lessons taught thus far. Many queries were raised by the students and that served as a basis for a good discussion platform to clarify doubts and clear misconceptions (Table 1). Questions raised were 'thrown back' at the students in the next available lesson and they were invited to comment and help answer their peers' queries. In this way, peer assessment and teaching was harnessed. The teacher was also able to check for understanding as well as reiterate and re-explain the purpose and concept taught.

Table 1

Student questions about inference from the first qualitative feedback.

Student 1	Can you infer something if there is not enough evidence?
Student 2	What to do if I have not come across the prior knowledge before?
Student 3	Do we have to use it in all the comprehension questions?

The second qualitative feedback was done at the end of the study. Five questions were carefully crafted. They were administered in a group setting with selected students acting as interviewers. The interviewers were all high progress students. Their opinions were first gathered before they conducted the small group feedback sessions with their classmates. The reason they were grouped together separately was because they might have influenced their peers if grouped with others as they had strong opinions and had no reservations about sharing them. As a result, the voices of others might not have been heard or opinions might have been swayed. The rest of the students were grouped randomly in groups of four to five. The teacher was not present during the group feedback sessions so as not to create any tension or undue stress on the students in giving their heartfelt views. The feedback sessions were voice recorded. It was heartening to hear a good understanding of the skill taught and positive feedback regarding the teaching process (Table 2).

Table 2

Feedback samples of the end-of-study qualitative feedback.

Q1	Do you think learning the inference skill is useful? Why? Why not?
Student A	Yes I think learning inference skill is useful because not only does inference skill help in answering comprehension questions it also helps in our daily lives when people are talking to us. Sometimes they want you to do something but they don't exactly explain it so we have to infer and that's why I think it's useful.
Q2	How does this skill help you in English learning?
Student B	I think this skill helps me to understand the passage more easily, I can understand the true feelings behind several characters.
Q3	What would help you learn the inference skill better?
Student C	Giving us different types of stories and passages that are of different difficulty would definitely help us and it would also help me develop my inference technique.

There was no significant improvement in terms of the students being able to answer inference questions correctly in their Primary 6 Preliminary paper as compared to their Semestral Assessment (SA)1 paper 2017. However, the class did well in the Primary School Leaving Examination (PSLE) 2017. Out of the class, 81.6% attained A-A* for English in their PSLE. Whilst the good results in the PSLE cannot be directly attributed to the success of the research study, the study has some relevance to the positive PSLE results as inference questions were part of the PSLE English paper and answering such questions had always been the class weakness.

Implications from observations

Although no concrete conclusion can be drawn about the explicit teaching of comprehension skills for answering inferential questions in narrative texts, a few interesting observations were noted in the course of this study that are worth highlighting. The implication for each observation is also described below as this might be useful to teachers in their comprehension instruction or for future studies in this area of focus.

Observation 1

Initially, the students were found to be cautious with their inferences. They were conditioned by teachers to look for *the* correct answer. A misconception that they had was that there could only be *one* inference to a question and there should only be *one right* answer.

For example, when they were asked (in a round robin format) to infer about the picture that they were given in the first lesson, they all gave similar inferences until the teacher stepped in to give a hint that there could be more than one inference that they could make for each picture.

Implication 1

This is something for teachers to ponder upon. Have teachers been teaching comprehension to the test so much that students have lost the ability to think creatively? There is a need to guide students to realise that there could be multiple or different inferences as long as they can be supported by evidence from the text.

Observation 2

If an inference question consisted of two questions, for example, 'What was Jane's opinion of going to school? **Why?**', one of the questions would usually be ignored by the students. The students had a tendency to not answer either the first or the second question. It could be due to carelessness or lack of awareness. However, once this common error was highlighted by the teacher, most of the students were more careful in subsequent comprehension exercises.

Implication 2

Students have to be reminded to answer both questions and that their answers are dependent on each other so it is crucial that they do not leave any question unanswered. This reiterates the fact that any inference made must be supported with evidence from the text.

Observation 3

The answers to inference questions were usually not stated explicitly in the text. The students were required to answer these questions in their own words. This proved to be a challenge for many of the students, even the high progress ones. They were found to be afraid and uncomfortable in using their own words to express their answers. They would normally copy a chunk from the passage and give it as their answer.

Implication 3

Answering inference questions is undeniably a higher order task. Teachers need to be patient with their students. Firstly, students have to be taught explicitly to express their answers to inference questions in their own words as the answers are usually not printed in black and white. Next, time and practice must also be given to students to hone this skill so that their confidence is built up.

Observation 4

The Lower Middle Progress (LMP) students had difficulty in expressing themselves as they lacked the vocabulary. In one of the lessons where the students were asked to compare and contrast character traits of two characters that were mentioned in their STELLAR reader, it was noticed that they had problems sourcing and using the right vocabulary to describe them. Thus, they ended up using generic adjectives such as 'good' and 'lucky'.

Examples

Teacher: "How are they (Kayley and Jade) different?"

Student A: "Kayley was a **good thief**. Jade was **not a good thief**."

Student B: "Kayley was not that **lucky**. Jade was **lucky**."

The teacher had to step in to initiate a discussion on appropriate vocabulary. The higher progress students managed to give responses such as 'experienced', 'amateur', 'apologetic' and 'honest', while the teacher provided other vocabulary for consideration such as 'recalcitrant' and 'gullible'.

Implication 4

Some comprehension questions require students to make inferences, based on the story, on the qualities of a main character. Thus, there is a need to equip students with a list of appropriate adjectives to describe the quality of a person (i.e. their character traits), e.g., determined, resilient, resourceful.

Observation 5

Writers love to use idioms, metaphors, and figurative or descriptive language to describe the feelings of characters in the story. In the primary school context, such phrases are commonly known as 'show sentences'.

Examples

'walked with a spring in his steps'	joyful
'sat at the edge of his chair...heart palpitated wildly.'	nervous/ afraid
'The test would be a breeze for him.'	confident

The students were expected to know the feelings these phrases referred to because many comprehension questions were asked about how the characters in the story felt.

Implication 5

It is important to acquaint students with some common show sentences that describe feelings so that they are able to infer the feelings of the characters in the stories more accurately. The most common 'feeling words' that students are familiar with are 'sad', 'happy' and 'angry'. However, many questions require students to be more specific in describing the feelings of the characters (e.g., disappointed, anxious, confident and helpless). It is therefore crucial that students are equipped with a wider repertoire of words that describe feelings.

Observation 6

The last observation but definitely not the least was that more students were seen annotating texts in 2017 than in 2016. Comprehension texts in SA1 2017 were compared with SA1 2016 and there was a noticeable increase in the number of annotated notes on them. One important observation to point out was that the inferences were jotted down on these passages as well. Higher, middle and lower progress students were seen making inferences as they read through a text. They were seen making references to the bookmarks given to them each time they had to do a comprehension assignment. They were able to apply what they had been taught in answering inference questions to making inferences about a text.

Implication 6

This significant observation probably shows that students need time to internalise what has been taught and see meaning in what they learn. It may also mean that the focused lessons on the teaching of the inference skill helped the students in comprehending the texts better. Thus, teachers must persevere in teaching comprehension skills so that students are better equipped in engaging and understanding new texts thereby enabling them to answer the questions (if any) that follow.

Conclusion

The explicit teaching of the inference skill appeared to have helped the students in comprehending texts better. The fact that the students jotted down their inferences as seen in their comprehension texts in SA1 2017 and Preliminary 2017 as compared to SA1 2016 is evidence of their understanding of the passages and the concept of making inferences. However, teachers need to ensure that the subject matter expressed in the texts are within the experiences of the students. This will greatly help in their understanding as they will have prior knowledge which they can tap into to make meaning.

With regard to the explicit teaching of the inference skill to answer inference questions in narratives, the heartening result was that the students became more aware of what such questions were like and what they needed to do to answer these questions. The inference equation made it easier for the students to remember the two components that would help them draw logical inferences: Inference (I) = Evidence from the Text (ET) and Prior Knowledge (PK). However, it will take time and more practice before the students from this study and students in general are comfortable and able to express their answers in their own words.

Recommendation

In order for the annotation of texts to take place meaningfully, the explicit teaching of comprehension skills must take place first. A remark made by a higher high progress (HHP) student after the study affirmed the decision to change the focus of this study from annotations to the teaching of the inference skill was a right one:

Thank you for teaching me how to annotate...my previous school threw stories at us and told us to annotate but for some reason never taught us how.

A point to highlight is that students use a variety of comprehension skills simultaneously to comprehend a text. As one particular skill is being taught explicitly, the rest of the skills 'should also be referenced, modelled, and encouraged throughout the process' (Duke & Pearson, 2002, p. 210).

One note of caution is that the teaching of comprehension is *not* about teaching comprehension skills per se. At the end of the day, it is about equipping students with these necessary skills so that they

internalise and are able to use them in a purposeful manner to deepen their understanding of the texts that they are reading, be it for class, pleasure or for assessment.

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Appendix: Guidelines for annotation

DIVING
for **INFORMATION**

Annotation

First Reading
For Enjoyment

Second Reading
For Meaning
WHaV
(Who, When, Where, What, Why, How + Vocabulary)

Third Reading
For Deeper Meaning
AIMS
(Ask questions, Infer meaning, Make connections, Summarise key ideas)

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Figure A1: A set of guidelines for Annotation.

Annotation Symbols

1 I circle the **characters** (Who)

2 I box the **time** and **setting** (When/Where)

3 I underline the **main idea** (What).

4 I bracket the **reasons** (Why) and the **manner** in which it happened (How)

5 I draw a squiggly line **under words** I do not know.

I use double-headed arrows for **things/people** that mean the same thing.

A Ask questions **M** Make connections
I Infer meaning **S** Summarise key ideas

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Figure A2: Annotation symbols.

Infer Meaning

When you *infer*, you use what you *already know* & the *evidence from the text* to go beyond the surface details to see other meanings that the details suggest or imply (not stated).
You read between the lines!

Complete the picture.
How do you know what you are drawing?

Prior Knowledge + Evidence from Text = Inference

PK	+	ET	=	I
seen in books	+	curly tail & fin	=	seahorse

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Figure A3: Inferring Equation.