USING MULTI-SENSORY APPROACH IN TEACHING READING OF WORDS WITH SILENT LETTERS AMONG YEAR THREE PUPILS

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Abstract

Identifying and reading words with silent letters are among some the problems faced by pupils in reading. This action research seeks to highlight the effects of using multi-sensory approach in teaching reading of words with silent letters to Year Three pupils from an urban primary school in Kuching, Sarawak. Introduced by Orton and Gillingham (1930), multi-sensory approach has been implemented in teaching reading which incorporates the three learning pathways, auditory, kinesthetic, and visual. By integrating these sensory elements, this research is also aimed at improving my teaching practice in teaching reading words with silent letters. The research participants were selected through purposive sampling. Analysis of the findings showed that the multi-sensory approach in teaching reading was useful in helping participants read better the related words. The results also suggested that the combination of various multiple intelligences such as audio-visual and visual-kinaesthetic yielded positive results. In terms of my teaching practice, there is improvement in my teaching of reading words with silent letters to Year Three pupils by taking into account the pupil's learning styles. Recommendation for the next cycle includes carrying out different activities using similar combination of multiple intelligences.

Keywords: reading, silent letters, multiple intelligences, multi-sensory approach

Abstrak

Mengenal pasti serta membaca perkataan yang mempunyai huruf yang tidak berbunyi merupakan salah satu daripada masalah bacaan murid. Kajian ini telah dijalankan dengan tujuan mengenal pasti kesan penggunaan pendekatan 'Multi-Sensory' dalam pengajaran bacaan perkataan yang mempunyai huruf yang tidak berbunyi dalam kalangan murid Tahun Tiga dari sebuah sekolah rendah di bandar Kuching, Sarawak. Pendekatan ini diperkenalkan oleh Orton dan Gillingham (1930) dan melibatkan tiga gaya pembelajaran iaitu kinestetik, visual dan auditori. Dengan mengintegrasikan ketiga-tiga gaya pembelajaran tersebut, kajian ini juga bertujuan untuk membantu saya meningkatkan teknik pengajaran saya berkaitan dengan kemahiran tersebut. Seramai tiga orang peserta kajian telah dipilih melalui persampelan bertujuan. Analisis dapatan kajian menunjukkan pendekatan 'Multi-Sensory' membantu peserta dalam membaca perkataan-perkataan tersebut. Hasil dapatan kajian juga menunjukkan penggunaan kombinasi tiga jenis gaya pembelajaran dapat memberikan hasil yang positif. Pendekatan ini juga telah menambah baik teknik pengajaran berkaitan dengan bacaan. Cadangan bagi kitaran seterusnya termasuklah melaksanakan pelbagai jenis aktiviti yang melibatkan kombinasi kecerdasan pelbagai yang sama.

Kata kunci: membaca, perkataan dengan huruf yang tidak berbunyi, kecerdasan pelbagai, pendekatan *multi-sensory*

INTRODUCTION

Context

Currently in my final year at the Institute of Teacher Education Batu Lintang Campus (ITE BLC), I am in my eighth semester for the Bachelor of Teaching Degree with Honours Programme and majoring in English as a Second Language (TESL). Throughout my five years stint in this programme, I have the privileges to gain teaching experiences with pupils of various primary schools in Kuching.

My previous practicum stints have seen me teaching at two Sekolah Jenis Kebangsaan Cina, SJK(C) schools in Kuching. As for my third practicum, I had undergone 12 weeks stint at SK Seri Kembangan, a national school located in the city of Kuching. All three schools are urban schools where I had taught the English subject to both Year Two and Year Three pupils. The pupils from all three schools however, were second language learners and had basic background knowledge of the English language. In addition to this, the English language was also only used during the schooling sessions. For the purpose of this write-up, I have used pseudonyms to refer to these schools and the participants of the research.

Research Focus

During the first few weeks at SK Seri Kembangan, I noticed reading errors made by pupils concerning words with silent letters. Folega (2015) describes silent letters as the letters in words that make no difference to the sound. Hence, the letter or letters in a particular word that are silent, do not appear in the pronunciation of the word. But, they do however, appear in the spelling.

Upon further scrutiny, I discovered that pupils read the words based on their understanding of direct letter-sound correspondence. For instance, reading the word 'gnat' literally as /gnat/ instead of /næt/. Hence, during the next reading lesson, I decided to try teaching them about silent letters and to help them see that certain words may not be sounded according to how it was spelt. Although this knowledge is crucial, I also wanted to keep the explicit explanation of rules to a minimum as my pupils already had the conception that learning English was difficult due to the many exceptions in the language.

Therefore, I incorporated the use of visual aids such as the spelling grid to help pupils break the words down into its individual phonemes. This visual aid also aided them greatly in discerning patterns in words (for instance, in the words 'gnome', 'design' and 'gnat', the silent 'g' always appears before the letter 'n', hence it must not be pronounced) allowing pupils to remember rules better. Their positive responses made me wonder of the wonderful results I could achieve in teaching silent letters through the use of our five senses.

In order to prove that this was a real issue faced by pupils in Year Three, I conducted a reconnaissance to help me further analyze the problem. I did this by carrying out a reading exercise. This reading exercise was aimed at identifying the percentage of pupils who were not able to read words with silent letters. Figure 1 shows an example of the reading exercise that I had conducted with my pupils.

Name:		Day:	
Class:		Date:	

A) Read the text aloud with words with the silent letter 'g'.

Today is not Sarah's day. She has phlegm in her throat and she has been coughing for days. All around, gnats are flying all over her. It has been a hot day. Sarah watches as her dog gnaws at a big bone. Once in a while, even Bob the dog gnarls at his bone. Sarah leaves him as she continues to draw and design her school project. Sarah hopes that she will feel better soon.

Total number of words read wrongly	/5

The reading exercise contained five words with the silent letter 'g' such as **'phlegm', 'gnats', 'gnaws', 'gnarls'** and **'design'.**

Figure 1. Example of the reading text with five words with the silent 'g'

The reading exercise as shown in Figure 1 was conducted by getting a group of eight pupils to read a text with five words with the silent letter 'g' such as 'phlegm', 'gnats', 'gnaws', 'gnarls' and 'design'. As pupils read the text, I noted the number of words with the silent letter 'g' that they had failed to read correctly. For example, those who read two words wrongly were scored as 2/5. Out of 10 pupils, I have selected three examples of the results from the reading exercise conducted. Table 1 shows the initial data obtained after administering the reading exercises.

Table 1

Total Number of Incorrect Words Read by Participants

Pupils	Silent 'g' words					Number of incorrect words
	phlegm	gnats	gnarls	gnaws	design	
Sarah	x	x	x	√	√	3/5
John	x	√	x	x	√	3/5
Lina	x	x	x	x	√	4/5

The results obtained show that all three pupils could not read more than three words with the silent letter 'g'. Problematic words included 'phlegm', 'gnats', 'gnarls',and 'gnaws'. All three pupils for instance were not able to read the words 'phlegm' and 'gnarls'. Hence, based on this tabulation of results, the silent 'g' posed a problem to the participants as they perceived and read the words directly using their understanding of letter to sound correspondence without the knowledge of the silent 'g'. As I analyzed the results collected from the initial data, it was clear that pupils were facing difficulties in identifying and reading words with silent letters.

Research Objectives
The purpose of this research was to improve Year Three pupils' ability in reading words with silent letters through the use of a multi-sensory approach. Besides this, this research was also aimed at improving my teaching of reading

words with silent letters among Year Three pupils through the use of a multi-sensory approach.

Research Questions
This study was implemented to answer the following research questions:

- How does using a multi-sensory approach improve the reading of words with silent letters among Year Three pupils?
- How does using a multi-sensory approach improve my teaching of reading words with silent letters to Year Three pupils?

ACTIONS

Planning and Implementation of Actions
I incorporated the multi-sensory approach which focuses on using the combination of visual, auditory and kinaesthetic learning style in teaching reading of words with silent letters to Year Three pupils. My sessions were carried out from 16th March until 30th April 2015, from 2 p.m until 3 p.m. twice a week.

Session 1: Visual-auditory activity (SMART Word Grid)
In this session, the SMART word grid was implemented by helping pupils to break down the words into individual letters, locate the silent letters and then colour the respective positions. The word grid consists of three parts or columns where pupils first said the word aloud and wrote out the individual letters. The columns with the silent letter that has been identified were then coloured. The pupils then discerned the patterns that each words share and the entire session was repeated with different silent letters such as silent 'k' and silent 'h'. Figure 2 shows an example of my pupil's work using the SMART Word Grid.
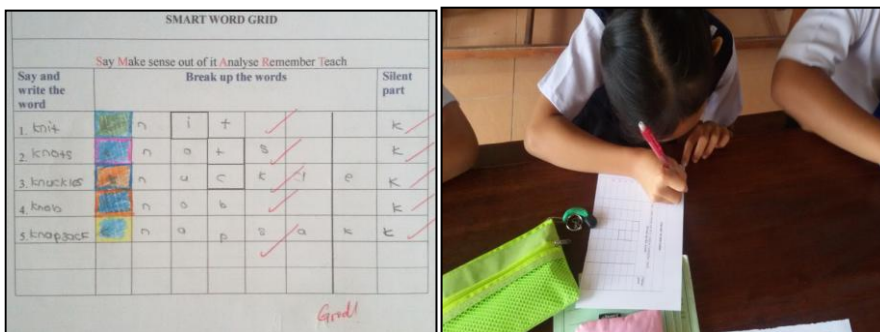

Figure.2 Sarah's product of SMART Word Grid using the silent letter 'k'

Rationale: The use of a word grid is to help pupils to understand the exceptions to letter-sound correspondences. As Reyhner (2008) points out that about half the words in the English language cannot be pronounced correctly using commonly taught phonic rules. Such exceptions apply to the learning of words with silent letters. In other words, pupils need a sound knowledge on the relationship between phonemes and graphemes. Hence, I believed that multi-sensory teaching helps to enhance memory and learning as links are consistently made between the visual (what we see) and auditory (what we hear) and those are pathways in learning to read and spell. Furthermore, the act of verbalizing, writing and colouring to highlight

the position of the silent letter 't' too would help to strengthen the pupils' orthographic memory of the word, hence easing them in reading words with silent letters.

Session 2: Visual-kinaesthetic (Silent Letters Dominoes Card Game)

In the second session, I incorporated the use of two learning styles; visual and kinaesthetic in my activity call 'Silent Letters Dominoes Card Game'. The aim of this game was to allow pupils to identify and rearrange the words according to the correct silent letter group. For this activity, they took turns to read aloud the words, assembled two words with the same silent letters and matched them until all sets have been completed. For this game, I included words from three categories of silent letters 'g', 'k' and 'h'. At the end of the game, we checked for the correct answers while reading the words aloud. Figure 3 shows the 'Silent Letters Dominoes Card Game' that I had carried out with Sarah, John and Lina.
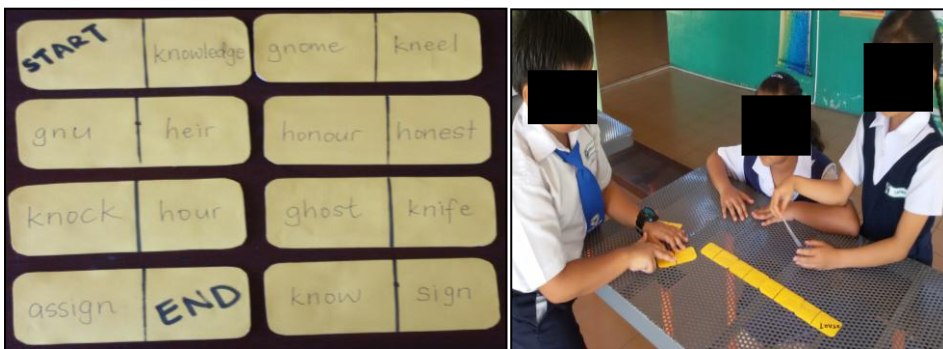

Figure 3. Example of the Silent Letters Dominoes Card Game done with pupils

Rationale: I carried out this activity because it has elements of a game such as fun-filled and competitiveness. Trehner (2011) supports the use of board games as it provides an environment that is supportive and non threatening, yet competitive enough to reinforce and apply learning. Hence, modified from the original game 'Dominoes', I believe that these elements helped pupils to pick up words with silent letters better as they read and recognized words in a fun and fast paced manner. As this game involved two pathways (visual and kinaesthetic), pupils practiced reading and recognizing words visually, enunciating aloud to find similar words with the same silent letter and performed actions to complete the game.

Session 3: Visual-auditory-kinaesthetic (Look-Read-Jump)

Here, the 'Look-Read-Jump' was a floor game that incorporated the visual-auditory-kinaesthetic learning modalities. This game allowed pupils to work cooperatively to look at a word (visual), then called it out (auditory) for the others to hear and finally jumped on the correct words (kinaesthetic). Here, the floor activity used the mixture of words from all three silent letters that the pupils have learned in the earlier sessions which includes 'g', 'k', and 'h'. The words on the floor were randomly placed to test pupil's ability to locate them. This activity also puts pupil's retention ability to the test, where it assessed how well they could remember the words with the silent letters in it. Figure 4 shows the layout of the 'Look-Read-Jump' activity.

Figure 4. Layout of the game 'Look-Read-Jump' and pupils' involvement

Rationale: I believe that using the floor game was a relaxing way of helping and encouraging pupils to read words that they were not familiar with. This was a principle that I hold onto strongly in order to allow them to absorb what was being taught easily. This was also in line with Krashen's Affective Theory in which Krashen (2009) implies the importance of comprehensible input with an environment that encourages lower anxiety in students, hence allowing for maximum and optimal learning. This particular game involved plenty of movement and it provided a fun experience as Pitchard (2005, p 58) posits that those who are good at recalling events associates feelings or physical experience with memory.

METHODOLOGY

Research Participants

Burns (2010) stated that action research involves taking a self-reflective, critical and systematic approach to exploring your own teaching contexts. Hence, I took part in this research to improve my practices and gauge the effectiveness of my methods as a future educator.

Other than myself, the participants involved in this study were three Year Three pupils from SK Seri Kembangan. All three pupils were chosen through purposive sampling from their respective groups and were given pseudonyms for anonymity. My participants comprised of two females and one male, coming from a diverse background of mostly Dayaks. They were also mostly second language learners of the English language and conversed in the most basic and simple English structures.

Research Ethics

In line with the research code of ethics, I took the necessary measures to ensure and protect the rights and interest of the participants involved in this action research. Firstly, a letter of consent was issued to pupils who took part as participants. Figure 5 shows the letter of parental consent given to pupils involved.

Figure 5. Parental consent form for the children's participation

The parental consent form granted permission for their children to be involved in the research. Parents' permission also included the agreement to allow pupils to stay back after school hours to participate in my sessions, to allow pictures and video recording to be made as well as the use of pseudonyms for protection of identity of the pupils.

Data Collecting Methods

Three data collecting methods were employed to measure the after effect of the proposed action plans which included document analysis, interviews and field notes.

Document analysis. I administered a reading exercise similar to the one that I had conducted in my reconnaissance stage. The reading exercise was carried out by getting each pupil to read a passage that contained five words with the respective silent letters 'g', 'k' and 'h'. As pupils read the passage, I noted the number of words with silent letters that they managed to read.

Interviews. Interviews were carried out with the three participants, Sarah, Lina, John and my mentor after the completion of all three sessions. The interviews were carried out in the afternoon after school hours. The interviews were conducted to find out the participants' and mentor's perception towards learning related reading silent letters and to discover their opinions about the activities conducted throughout the sessions. All participants and mentor gave their written answers in response to the semi-structured questions.

Field notes. Besides this, I also kept a record of field notes that I had used during the sessions. These field notes were recorded during the sessions carried out in school. I recorded my observations of the participants' progress. My observation throughout these periods included the behavioral outcome and achievement of the activities. Pictures were attached to help in analyzing the outcomes at a later period.

Data Analyzing Techniques

In order to analyze the data from my data collecting methods, I interpreted the data using several data analyzing techniques such as pattern and content analysis.

Reading exercise. In the reading exercises, participants read three passages of five words with the silent letters 'g', 'k', and 'h' respectively. Their responses were categorized in terms of the number of right and wrong words read. This was done to identify pupils' capability in recognizing and reading the words with silent letters. Table 2 shows the categorization of the results.

Table 2

Categorization of Right and Wrong Number of Words Per Passage

Silent letters	Number of words read correctly	Number of words read wrongly	Total number of words in the passage
'g'			
'k'			5/5
'h'			

Interview. The interview conducted with the participants and mentor involved different open ended questions to gauge their attitude and opinion of the sessions conducted. The following questions were used in the interview:

1. Do you know what silent letters are now?
2. Can you tell me what silent letters are?
3. How do you feel about reading words with silent letters now?
4. What do you think about the activities that we have done so far?
5. What do you think of my previous reading lessons in class?
6. What do you think of the reading lessons carried out using multi-sensory approach?
7. Do you think that students enjoyed the activities?
8. Do you think that these activities help in reading words with silent letters?

The responses obtained were analyzed by coding the words into an identifiable theme. Figure 6 shows the coding process of an interview transcript of my mentor.
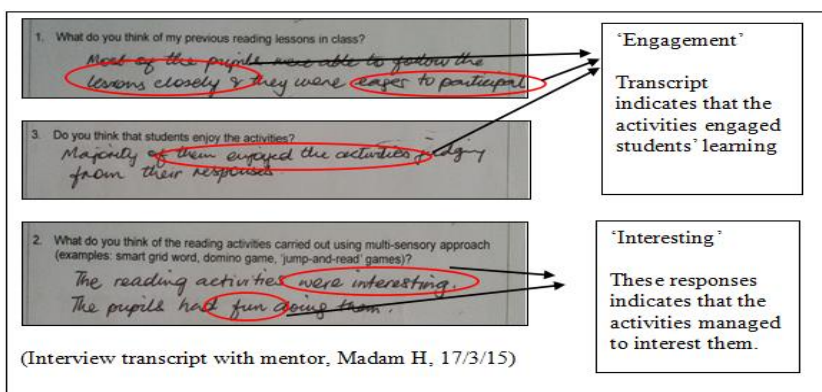

Figure 6. Interview transcript with mentor shows the coding process

Based on these responses, I grouped certain words and behaviors together based on themes. By coding these responses and identifying a theme, I determined if multi-sensory approach had helped to make the reading process successful. For

instance, the response from my mentor indicated that this approach was successful in 'engaging' the pupils as it was 'interesting'. The same method was also used to code observations from my field notes.

Data Checking Techniques

Among the data checking techniques used includes person, and time triangulation.

Person triangulation. Person triangulation was used to validate two data collection methods which included document analysis and field notes. In document analysis, the reading exercises were supported by an audio recording of pupils reading aloud the exercises. I had also sought the help of my critical friend to double check the errors made by my pupils. This method helped me to prevent errors in accuracy of my data as my critical friend provided me secondary support in validating the answers. Person triangulation was also used in my field notes. With pictures as evidences, these helped me to discern the behaviour and responses during the activities conducted. My critical friend observed my sessions as well and jotted down his observation into his field notes.

Time triangulation. In time triangulation, I administered the reading exercise and interview during my internship period. For instance, the reading exercises were carried out once after all three sessions had been completed and another during my internship period. The same method was applied to my interviews where the written interview was carried out on 16th March and the oral interview on 28th July 2015. The reason these exercises were carried out twice was to identify whether my action plans had a consistent and significant result on the participants.

FINDINGS

- **How do multi-sensory approach improves my practice in teaching reading to Year Three pupils?**

Multi-sensory approach has changed my reading lessons from a dull drilling lesson into a fun and interesting lesson. Previously, difficulties in recognizing and reading silent letters were dealt with by conducting series of repetition. Figure 7 shows an excerpt of my previous reflection after teaching reading using drilling and repetition for several lessons.

Reflection on a drilling lesson (9 February 2015)

Reflection on a drilling lesson (16 February 2015)

Both reflection showed how pupils were 'unenthusiastic, bored, and demotivated' during drilling lessons. Despite the repeated drilling, students continued to mispronounce words with silent letters.
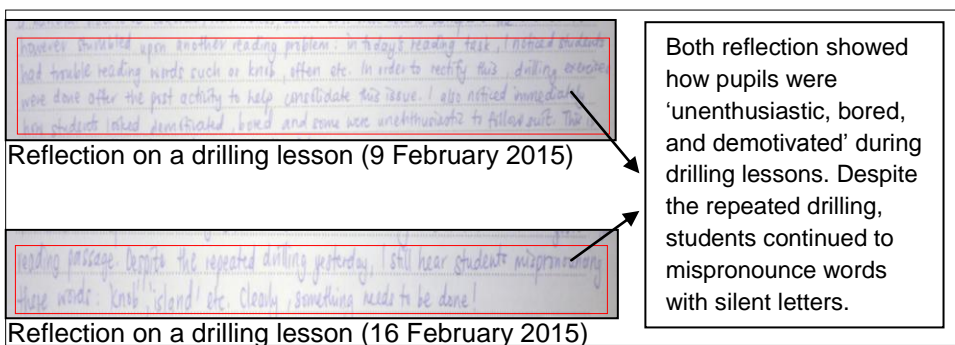
Figure 7. Previous reflection of teaching reading of words through drilling

Here, I noticed how pupils looked 'unenthusiastic, bored and demotivated' when drilling was involved. In addition to this, I noted too how each time the class revisit the same passage, pupils constantly repeat the same reading errors. This showed that the pupils were unable to recall the pronunciation of the words with silent letters.

Hence, I had decided to adopt a different way of getting the pupils to recognize and read these words. As teaching silent letters could proof to be rather technical, I used a visual technique to help the pupils 'see' the silent letters. Consequently, I discovered that since using the visual technique had showed positive results, I decided to incorporate the five senses into teaching reading, hence paving way towards the multi-sensory approach.

After implementing the multi-sensory approach, I discovered that this approach has enabled me to teach the reading of words with silent letters in a fun, interesting and engaging manner. Figure 8 shows an excerpt of the positive responses obtained from my pupils and critical friend regarding my practice.
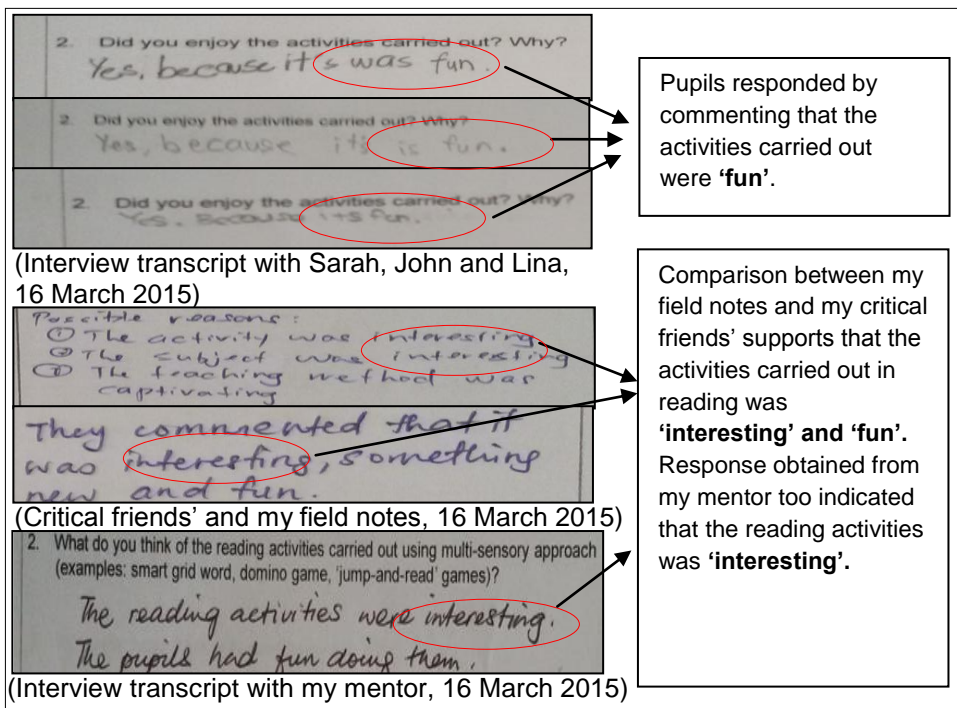
Figure 8. Positive responses obtained from pupils, critical friend and mentor

Based on the excerpt, my pupils had fun in learning to read the silent letters using various activities in the multi-sensory approach. Besides this, my critical friend observed my teaching sessions. He agreed that teaching reading using all of our senses was an interesting approach. My mentor too gave me positive responses regarding the multi-sensory approach. As she believes that 'we remember better when doing', she was of opinion that this approach was effective in getting pupils to read silent letters as the activities carried out were interesting, fun and enjoyable.

As such, incorporating all of our senses in reading too helped pupils in retention of the word.

The multi-sensory approach has improved my practice in teaching reading because it has allowed me to explore a new technique of teaching reading. Using our sense of sight, hearing and movement to teach reading has changed the process of merely drilling to a more meaningful hands-on activity. Figure 9 shows how multi-sensory approach utilizes all three types of learning modalities - visual, auditory and kinaesthetic in teaching pupils to read the silent letter words.

| Pupils used the 'SMART Word Grid' to help breakdown and identify the position of silent letters in a word. | Pupils play the Silent Word Dominoes by identifying the words and rearranging the cards into the same group. | Pupils work together in 'Look-Read-Jump' by taking turns to call out a word, listening to their friends and jumping on the targeted word. |

Figure 9. Activities that incorporate visual, auditory and kinaesthetic elements

As such, using the multi-sensory approach has allowed me to explore the concept of using senses - visual, auditory and kinaesthetic in teaching reading. Apart from the existing techniques of teaching reading, this approach has made me more confident about incorporating these learning modalities into my lessons in the near future.

- **How does using the multi-sensory approach improve the reading of words with silent letters among Year Three pupils?**

This approach has helped my pupils to better read words with silent letters. In order to determine their improvements, I compared the initial data of the reading exercises with the after-effect results. Figure 10 shows the initial data collected before I had taught using the multi-sensory approach.

Pupils	Words with silent letter 'g'					Number of incorrect words	Words in bold indicates the incorrect words read by pupils.
	phlegm /flem/	gnats /næts/	gnarls /nɑːlz/	gnaws /nɔːz/	design /dɪˈzaɪn/	5/5	
John	**/flegm/**	/næts/	**/gnɑːlz/**	**/gnɔːz/**	/dɪˈzaɪn/	3/5	
Sarah	**/flegm/**	**/gnæts/**	**/gnɑːlz/**	/nɔːz/	/dɪˈzaɪn/	3/5	
Lina	**/flegm/**	**/gnæts/**	**/gnɑːlz/**	**/gnɔːz/**	/dɪˈzaɪn/	4/5	

Figure 10. Initial data (23 February 2015)

Based on the initial data, the pupils' score were determined after the pupils read a passage with five words with the silent letter 'g'. From this result, I discovered that three pupils could not read at least three words with the silent letter 'g'. For instance, Lina scored four out of five, where she was unable to read four words with the silent letter 'g' such as 'phlegm', 'gnats', 'gnarls' and 'gnaws'. This is as indicated by the bold word in Figure 10. Hence, it was clear that all three pupils had problems reading the silent letter words where they pronounced the silent letter 'g'. However, my pupils had shown quite a significant improvement after going through the multi-sensory activities. Figure 11 shows their improvements in the after-effect data.

Pupils	Words with silent letter 'g'					Number of correct words	Words in bold indicates the incorrect words read by pupils.
	phlegm /flem/	gnats /næts/	gnarls /naːlz/	gnaws /nɔːz/	design /dɪˈzaɪn/	5/5	
John	/flem/	/næts/	/naːlz/	**/gnɔːz/**	/dɪˈzaɪn/	1/5	
Sarah	**/flegm/**	/næts/	/naːlz/	/nɔːz/	/dɪˈzaɪn/	1/5	
Lina	/flem/	/næts/	/naːlz/	/nɔːz/	/dɪˈzaɪn/	0/5	

Figure 11. After Effect Data (18 March 2015)

After using the multi-sensory approach, I noticed that all three pupils showed improvement in their readings. The after-effect reading exercise results showed how Sarah, Lina and John was now able to read at least four out of five words correctly. This was an improvement as before this, they could only read one or two of the words. For instance, Lina had shown a vast improvement as she managed to read all five words correctly as opposed to being able to read only one word prior to this. Although John and Sarah did not score a perfect five out of five, I was glad because they had shown quite an improvement as compared to before. The success I had with my pupils did not stop here. As they had shown improvement in reading words with the silent letter 'g', I carried out the same teaching steps and assessment using the silent letter 'k' and 'h'. Figure 12 shows the results from my findings with the silent 'k' and 'h'.

Participants	Total numbers of silent letter words read correctly (5/5)		Pupils were able to read at least four out of five words with silent letter 'k' and 'h' correctly.
	Silent 'k'	Silent 'h'	
John	4/5	4/5	
Sarah	5/5	5/5	
Lina	5/5	4/5	

Figure 12. Positive results with silent 'k' and 'h'

The results were encouraging as my pupils were able to read these words without much difficulty. Again, although the results were not perfect scores, this was still a positive indicator on using senses in learning to read. I was relieved that all three pupils had shown similar success in reading words with silent letter 'k' and 'h'.

REFLECTION

Summary of Findings

The results of this research suggested that the use of the multi-sensory approach has brought about many benefits to both myself and my pupils. For instance, this approach has improved my teaching practice where the reading of silent letters are concerned. In addition to this, this approach has brought about positive results and improvements in my pupils' ability to identify and read words with silent letters.

The results based on this research had been a positive one where it supports key ideas such as when pupils are taught with approaches that complemented their learning style, their achievement level is raised significantly higher. This research supports Cheng and Kingsley's (1998) study whereby higher students' achievement relates to a match between student learning styles and teacher teaching styles. In other words, the use of multiple intelligences which gives rise to the use of different learning styles within a classroom has the capability of producing positive achievement for both pupils and educators.

In short, the central idea behind multi-sensory approach in which it uses the combination of all three learning modalities - visual, auditory and kinaesthetic gives opportunities to all learners of all types to fully partake in the planned learning activities whatever their learning style preference style may be. For future educators like me, this approach has raised my awareness of pupils' individual differences and my willingness to take risk in providing a variety of teaching styles to accommodate my diverse learners.

Further Reflection

Throughout the process of this action research, there were many aspects that I could have worked on in order to improve the research as a whole. This involves being organized, understanding ways to validity findings through data collection method as well as having an in-depth knowledge of the said approach.

As this was my first attempt at conducting a research, I had to admit that it had been a gruelling process. Hence, there are many aspects that I would like to reflect on. Firstly, I have learnt the importance of being organized as well as systematic. Drawing a meticulous execution plan is important because it allows us to see the action research as a whole and at the same time accommodates changes. This is especially true as I was overwhelmed by the amount of work that needed to be considered. Although a general execution plan was designed for myself, however I did not manage certain aspects of the research properly and accordingly to time. Despite this, I now realized that it is always worth the time to put in at the start because then I would be able to be much more efficient and effective. Hence, one of the greatest lessons that I have learnt from this research is the management of time.

Besides this, I have also discovered the importance of understanding the mechanics behind data collecting methods such as interviews. During the research process, I had conducted interviews with my participants in order to obtain the necessary information. Hence, I interviewed all three pupils by distributing a written

interview and had them sat together to answer the questions. As a result, one of my participants, John had a hard time answering the questions and instead copied his friend's responses. I was only aware of this when I looked and analyzed their responses, only to discover that John did not answer the questions properly as intended. Hence, I realized that the proper plan of action instead should have been to bring out the pupils individually to answer the written interview. This was to avoid them from copying the responses from their friends. Here, I felt that it was partially my mistake for overlooking the technical aspects in interviewing pupils. An incoherent response could throw off the reliability and validity of the research. Although the error had been rectified by interviewing John orally, however this incident has taught me to be more careful and consider all aspects before carrying out the said data collection method.

In addition, one dilemma or challenge that I encountered in this process of learning was regarding my practice in using the multi-sensory approach. After an in-depth reading, I realized that this approach could be further enhanced by first completing a diagnostic test. By analyzing the pupils' preferred learning styles, a teacher could then begin to design his or her teaching techniques and activities. This in turn strengthens and consolidates the pupils' learning. As I did not conduct a diagnostic test on my pupils to discover their preferred learning styles, my approach was to use the different combination of learning modalities and implement them. This is to provide a holistic way for pupils to learn. For instance, although a visual learner would benefit from a visual presentation, nevertheless using the combination of visual-kinaesthetic could help to strengthen his kinaesthetic elements in learning.

In relation to this, I believe that the exploration of senses in teaching is important as it can help to develop pupils' learning by taking into account their preferred learning styles. Although it is important to help pupils learn through their strengths, I feel that it is just as vital that we also need to use all the modalities of learning to help them strengthen their weaker areas. This supports Peter's (2010) statement that recognizing different talents brought to the classroom allows teachers help pupils to succeed by allowing them to use their natural intelligences. Indeed, this would allow educators to capitalize on an individual's dominant learning modality while delivering instruction that will strengthen the remaining learning pathways.

This approach could be advocated for beginning teachers in the Malaysian context because the incorporation of multiple intelligences is in line with the *Kurikulum Standard Sekolah Rendah* (KSSR) whereby one of its educational aspects includes multiple intelligences. Our education system supports multiple intelligences to be infused and woven into the classroom lessons to prepare pupils for the challenges of the real world. Therefore, as teachers prepare themselves in facing the new global world, it is only crucial that teachers should be equipped with the knowledge of multiple intelligences to enable the teachers to design and accommodate a large group of pupils.

SUGGESTIONS FOR NEXT CYCLE

In my next cycle, I would like try to explore a variety of activities under the combination of modalities that I have implemented. For instance, under visual-

auditory, I would to try to adopt different activities such as 'Spelling Bingo', 'I Spy' and many others. Trying out a variety of activities under these modalities could help to expand my repertoire in developing my pupils' learning styles in the future.

Besides trying out different activities, I would also like to expand on the combination of different modalities particularly auditory-kinaesthetic in my future lessons. This is because in my first cycle, I had only implemented activities with the combination of visual-auditory, visual-kinaesthetic and visual-auditory-kinaesthetic modalities. Due to time constraints, I did not have the chance to further explore other combination of these learning modalities.

In the future, I would also like to apply this approach to teach other aspects of the language such as the spelling system, word classes and many others. This is because the multi-sensory approach is deemed as a powerful tool of exceptional breadth, depth, and flexibility (The Academy of Orton-Gillingham Practitioners and Educators, 2012). Its flexible concept of focusing on meeting the needs of pupils in learning is what makes it an applicable approach that could be integrated within any subject and topics.

CONCLUSION

In short, this action research has taught me ways to upgrade myself and improve my professional training. As a trainee teacher, I have discovered the importance of understanding pupils' multiple intelligences. This knowledge is crucial for my teaching practices in the future as it gives me a sturdy framework of how I can best develop their learning styles according to each pupil's multiple intelligences. Hopefully, my approach in teaching reading at a smaller scale may transform the way learning takes place, leading to better educational service.

REFERENCES

Academy of Orton-Gillingham Practitioners and Educators. (2012). *The Orton-Gillingham Approach.* Retrieved from http://www.ortonacademy.org/.

Bahagian Perkembangan Kokurikulum. (2012). *Dokumen Standard Bahasa Inggeris SK Tahun 3.* Kuala Lumpur: Kementerian Pelajaran Malaysia.

Brown, H. D. (2001). *Teaching by principles: An interactive to language pedagogy.* New York: Pearson Education.

Burns, A. (2010). *Doing action research in English language teaching: A guide for practitioners.* New York: Routledge.

Caylak, E. (2010). The studies about phonological deficit theory in children with developmental dyslexia: *American Journal of Neuroscience, 1*(1). Retrieved from http://thescipub.com/PDF/ajnsp.2010.1.12.pdf.

Cheng, M. H., & Kingsley, B. (1998). *Bridging the gap between teaching style and learning style.* United States of America: Prentice Halls Regents.

Ehri, L. C., & Wilce, L. S. (1982). The salience of silent letters in children's memory for word spellings. *Memory and Cognition, 10*(2),155-166.

Folega, S. (2015). *English language: Silent letters.* Retrieved from http://www.howto learnenglish.co.uk/english-language-silent-letters.html

Institute of Education Sciences. (2010). *Orton-Gillingham based strategies.* Retrieved from http://ies.ed.gov/ncee/wwc/pdf/intervention_reports/wwc_orton gill_070110.pdf

Krashen, S. (2009). *Principles and practice in second language acquisition.* Retrieved from http://www.sdkrashen.com/content/books/principles_and_practi ce.pdf.

Lehtonen, A. (2009). *Contemporary perspectives on reading and spelling.* New York: Routledge.

Light, J. & McNoughton, D. (2012). *Letter-sound correspondences.* Retrieved from http://aacliteracy.psu.edu/index.php/page/show/id/6/

Lunenberg, F. C., & Lunenberg, M. R. (2014). Applying multiple intelligence in the classroom: A fresh look at teaching writing. *International Journal of Scholarly Academic Intellectual Diversity, 16* (1), 1-14.

McNiff, J. (2002). *Action research: Practice and principles.* New York: Routledge.

Muhammad Aslam Sipra. (2013). Impact of English Orthography on L2 acquisition. *English Language Teaching, 6*(3). Retrieved from http://www.ccsenet.org/ journal/index.php/elt/article/viewFile/25061/1564

Moustafa, B. M. (1999). *Multisensory approaches and learning styles theory in the elementary school: summary of reference papers.* Retrieved from http://files. eric.ed.gov/fulltext/ED432388.pdf

Peters, L. C. (2010). *Teachers help students succeed by using multiple intelligence theory in the classroom.* Retrieved from http://www.ttacnews.vcu.edu/2010/09/ by-laura-c-peters-ma/

Pritchard, A. (2005). *Ways of learning: learning theories and learning styles in the classroom.* New York: David Fulton Publishers.

Reyhner, J. (2008). *The reading wars.* Retrieved from http://jan.ucc.nau.edu/jar/ Reading_Wars.html.

Schoepp, K. (2001). Reasons for using songs in the ESL/EFL classroom. *The Internet TESL Journal, 2*(2). Retrieved from http://iteslj.org/Articles/Schoepp-Songs.html

Treher, E. N. (2011). *Learning with board games.* Retrieved from http://www.the learningkey.com/pdf/Board_GamesTLKWhitePaper_May16_2011.pdf

Ureno, S. (2012). *Using multisensory methods in reading and literacy instruction.* (Unpublished Doctoral Dissertation). CA: University La Verne, California.

Vickery, K. S., & Reynolds, V. A. (n.d.). *Multisensory teaching approach for reading, spelling and handwriting, Orton-Gillingham based curriculum, in a public school setting.* (Unpublished Doctoral Dissertations). Texas: University of Texas.

Willie, E. (2004). *Spelling power made easy.* New Delhi: Pentagon Press.

Wood, C., Wade-Woodley, L., & Holliman, A. J. (2009). *Contemporary perspectives on reading and spelling.* New York: Routledge.