THE EFFECTIVENESS OF USING EXPLICIT PHONOLOGICAL AWARENESS INSTRUCTION IN HELPING SIX-YEAR-OLD CHILDREN LEARN TO READ IN ENGLISH

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A DISSERTATION SUBMITTED AS PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER IN EDUCATION

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DECLARATION

I hereby declare that the work in this dissertation is my own except for quotations and summaries which have been duly acknowledged.

Date:

Signature:

Name: **ZALILAH BT MOHAMAD SULAIMAN**

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I praise and glorify the name of Allah because it is with His Grace that I get this opportunity to pursue my Master in Education Degree at Sultan Idris University of Education.

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ABSTRAK

Kajian ini meneliti keberkesanan mengguna arahan eksplisit kesedaran fonologikal dalam membantu kanak-kanak berumur enam tahun belajar membaca dalam Bahasa Inggeris. Instrument yang digunakan untuk menyampaikan arahan eksplisit kesedaran fonologikal ialah program ***LeapFrog SchoolHouse*** dan instrument pengujian ialah ***LeapTrack Assessment and Instruction System*** yang dibina oleh ***LeapFrog SchoolHouse*** Incorporation, USA. Sebuah bilik darjah, dinamakan ***The Literacy Center***, disediakan bagi menempatkan peralatan seperti ***LeapMat***, ***LeapDesk***, ***LeapPad*** dan sebuah computer telah dimuatkan dengan sistem ***LeapTrack Assessment and Instruction System***. Peralatan-peralatan ini merupakan bahan bantu pengajaran dan juga permainan bagi kanak-kanak prasekolah ini. Arahan eksplisit kesedaran fonologikal, yang disampaikan dalam pengajaran tiga puluh minit, diberi kepada dua belas kanak-kanak prasekolah UPSI sepanjang tahun pengajian mereka. Pengajaran dijalankan setiap hari dari hari Isnin hingga Khamis selama tiga puluh empat minggu menggunakan prosedur mengajar kitaran dua minggu. Kitaran dua minggu ini bermula dengan arahan eksplisit kesedaran fonologikal dari guru, diikuti dengan latihan unit yang diajar. Kemudian kanak-kanak ini dibenarkan belajar sendiri tetapi mereka boleh mendapatkan bantuan guru pada bila-bila masa. Pelajaran ini akan diajar semula dan kanak-kanak akan berlatih dengan latihan-latihan lagi. Akhir sekali, kanak-kanak akan diuji. Ujian Diagnostik Awal Literasi dijalankan pada awal tahun. Status membaca setiap kanak-kanak akan diproses dalam keputusan ujian mereka dan latihan-latihan berkaitan akan dicadangkan bagi setiap individu. Setiap kanak-kanak membuat latihan yang dicadangkan dan selepas tiga bulan, mereka menduduki Peperiksaan Membaca Awal Tahun. Sekali lagi keputusan peperiksaan akan memproseskan kebolehan membaca dan mencadangkan latihan yang perlu mereka lakukan. Kitaran mengajar – memberi arahan eksplisit kesedaran fonologikal, menjalani latihan, mengajar semula, menjalani latihan lagi dan menguji akan diulang sehingga hujung tahun. Kanak-kanak ini akan menduduki Ujian Membaca sebanyak tiga kali sepanjang tahun. Kajian ini mengamalkan kaedah kajian kes dan kedua-dua peserta dan juga program telah dikaji. Aktiviti pengajaran dan pembelajaran bilik darjah dirakam video dan kemudian ditranskripsikan. Kemajuan membaca kanak-kanak ini ditabulasikan. Selepas dua bulan mendapat arahan eksplisit kesedaran fonologikal, kanak-kanak ini boleh membaca perkataan-perkataan KVK seperti CAT, DOG, SIT, PET, CUT dan perkataan *sight* seperti IS, ARE, WAS, A, I, and THE. Pada penghujung tahun 2006, empat (33.34%) daripada dua belas kanak-kanak ini dapat membaca Buku Bacaan Kanak-kanak tahap dua (Darjah Dua), empat orang lagi (33.33%) boleh membaca Buku Bacaan Kanak-kanak tahap satu (Darjah Satu), dan empat orang lagi (33.33%) boleh membaca Buku Bacaan Kanak-kanak tahap prasekolah. Sebagai kesimpulan, program ***LeapFrog SchoolHouse***, yang menggunakan kaedah arahan eksplisit kesedaran fonologikal, dapat membantu kanak-kanak berumur enam tahun menguasai membaca dengan lebih cepat. Kesemua dua belas kanak-kanak boleh membaca dengan mudah - 66.67% boleh membaca tahap yang lebih tinggi daripada tahap mereka, sementara 33.33% boleh membaca pada tahap sendiri (prasekolah).

ABSTRACT

This study examined the effectiveness of using explicit phonological awareness instructions in helping six-year-old children learn to read in English. The instrument used for delivering the explicit phonological awareness instructions was the ***LeapFrog SchoolHouse*** program and the instrument for assessment was the ***LeapTrack Assessment and Instruction System*** designed by ***LeapFrog SchoolHouse*** Incorporation, USA. A classroom, called ***The Literacy Center***, was set up to house the equipment such as the ***LeapMat***, ***LeapDesk***, ***LeapPad*** and a computer installed with the ***LeapTrack Assessment and Instruction System***. These equipment were the support material and acted as play-tools for the preschool children. The explicit instructions, which took place in thirty-minute lessons, were delivered to twelve UPSI preschool children through out their 2006 school year. The lessons were conducted every day from Monday to Thursday for thirty-four weeks using a two-week cyclical teaching procedure. The cyclical teaching procedure started with explicit instructions from the teacher, followed by practice of the unit taught. Then the children were allowed to work on their own but they could always go to their teacher for help. The lesson was then re-taught and the children practiced with more exercises. Finally the children would be assessed. Early Literacy Diagnostics Tests were administered in the beginning of the year. Each child's reading status would be processed in their test results and exercises for individual child would be prescribed. Each child then did the prescribed exercises and after three months, they sat for the Beginning-of-Year Reading Assessment. Again the results would process their reading ability and prescribe the necessary exercises they needed to do. This process of teaching, practising, reteaching, more practicing and assessing would be repeated till the end of the year. The children had to sit for a total of three Reading Assessments through out the year. This research adopted a case-study design and both the participants as well as the program were studied. The classroom teaching and learning activities were video recorded and later transcribed. The children's reading progress was also tabulated. After two months of explicit instruction, the children were able to read CVC-words like CAT, DOG, SIT, PET, CUT and common sight words like IS, ARE, WAS, A, I, and THE. By the end of 2006, four (33.34%) out of the twelve children were able to read Children's Readers graded at level two (Primary Two), another four (33.33%) children were able to read Children's Readers graded at level one (Primary One) and the remaining four (33.33%) were able to read Children's Readers graded at preschool level. To conclude, the ***LeapFrog SchoolHouse*** program, which advocated the use of explicit phonological awareness instructions, was able to help six-year-old children learn to read faster. All twelve children were reading with reasonable ease – 66.67% were reading above their grade level while 33.33% were reading at grade level.

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CHAPTER 1

INTRODUCTION

1.1 Background to the Problem

In 1998, the examination syndicate, Ministry of Education, Malaysia reported an impressive eighty percent of our pupils surpassed the national minimum achievement level in reading comprehension. They arrived at this conclusion after analyzing the Primary School Achievement Test administered in Year Six for four years from 1994 to 1997 (UNESCO, Country Report, 2000). In this report there was a statement which read, "*...the data for Reading and Writing should not be equated with the level of literacy, as candidates who DID NOT meet the level of achievement set for a particular year may still be literate.*" (p2:2) The researcher would like to argue that the reverse may also be true – that those who DO score good grades for the Achievement Test may not necessarily be reading, they could just be guessing. She says this because the reading comprehension paper has multiple choices for the responses and candidates need only choose the correct one. Therefore, the guessing strategy that candidates may employ cannot be completely dismissed.

Another disturbing report is the reading profile of Malaysians, written by Frank Small & Associates after a nationwide survey on reading in 1996. According to them, out of 3997 children between the ages five to nine studied, only fifty-two percent (52%) were able to read. However, out of this fifty-two percent (52%) who can read, only thirty percent (30%) actually practise reading. These figures are

unquestionably below the reading standard set by UNESCO, which is 97%. Readers may argue that these are old or outdated data and that things are a lot better now. Unfortunately, to this date there has not been another nationwide survey on reading as done by Frank Small & Associates. On the other hand, there have been reports in the local newspapers that over a hundred thousand (100 000) primary school children are still not able to read in Bahasa Malaysia. This statement was made by the Minister of Education, Tan Sri Hishamuddin Husin (The Star, 2006). The number of children who cannot read in English has yet to be discovered.

The fact that many students cannot read at their grade level presents cause for worry because research has shown that students who have reading problems early in their lives will continue to have these reading problems later at adulthood, if no appropriate intervention is applied (Lenchner, O., Gerber, M. M., & Routh, D. K., 1990). This situation must have proven true for many Malaysian students. Those who have reading problems when they were young, struggle with the text they have to read at secondary and tertiary levels.

Bonita Grossen (1997), a lecturer at the University of Oregon, studied some two thousand refereed journal articles concerning researches on early reading acquisition and wrote a report she called "A synthesis of Research on Reading", (1997). These two thousand researches, which were conducted over the course of thirty years (from 1965-1996), were published by the National Institute of Child Health and Human Development, United States of America. In this report the writer found that about forty percent of the population has reading problems severe enough to hinder their enjoyment of reading. These problems are not developmental and do not diminish over time; without proper interventions they continue into adulthood.

Here, in Malaysia, Halimah Badioz Zaman (2000) quoted The World

Education Report (1993), which stated that Malaysia had one of the lowest literacy rates (78.4%) compared to her other Southeast Asian neighbors. The data shows that it is absolutely essential that educators identify reading difficulties early and provide early reading interventions immediately to help students progress.

Parents and teachers want to see their children progress and become successful in their lives, but at sixteen or seventeen years old, any form of intervention is not going to do much good. Secondary school teachers are trained to teach reading strategies such as INSERT – Interactive Notation to Effective Reading and Thinking, and CSI – Cognitive Strategy Instruction, and KWL – What you already know, what you want to know and what you have learnt from the text (Ogle,1996). However, these strategies are meant for students who have an adequate mastery of the reading skill. Those who face reading difficulties may not find the strategies very helpful because they are meant to aid comprehension among advanced readers. What is more critical is to help students who have problems with reading to learn to read first before they can be given the strategy to use the higher level skills of reading such as inferencing and predicting.

Clearly, what needs to be done is to devise and execute some form of action plan to help children who are not reading well. Therefore, the researcher has decided to go back to basics and start with very young learners. She wants to give explicit, systematic reading instruction to six-year-old children so that they can use them independently. Her primary goal is to get these children to be successful readers and to make them passionate about reading.

Once they have discovered the joy of reading, they should progress from **learning to read to reading to learn** (Wagner, R.K., & Torgeson, J. K., 1987). Reading-impaired children are kept from exploring science, history, literature,

mathematics and the wealth of information that is presented in print. This finding was discovered by the National Institute for Child Health and Human Development after studying a collection of some three thousands papers written on reading based on research done from 1965 to this day.

Reading a road map, or the instructions for a microwave pizza are everyday tasks that could be quite daunting for those with reading difficulties. And as more information becomes available on the Internet, those who cannot read will be left behind by an information revolution that is largely text based. It is therefore imperative that our students know how to read, and teachers and instructors must help them acquire this valuable skill.

After the children have been introduced to the basic rudiments of reading through the phonemic and phonological awareness instructions, they then go through a phase where they are guided into practicing what they have been taught. Finally they are assessed in their reading ability using a comprehensive reading assessment instrument. The purpose of this research is to make these children strategic and motivated readers. In this paper, *strategy* is defined as a particular scheme used by a child to help him attain a certain objective. In this case, the strategy that the child employs will be using explicit phonological awareness in helping him acquire the early reading skills.

Apart from the above reasons, it should be mentioned that Sultan Idris University of Education has identified the ***LeapFrog SchoolHouse*** program as one of the modules that it will assess in order to see its effectiveness in teaching reading. For the purpose of completing this master degree in education, the researcher is writing on phonemic awareness instruction as a strategy in teaching reading, one part of the research being undertaken by a group of researchers at Sultan Idris University of

Education, headed by Associate Professor Doctor Sali Zaliha Mustapha.

1.2 Theoretical Framework

The researcher finds Coltheart's ideas about how a child learns to read rather interesting because Coltheart (1978) approaches the learning to read process from a psychometric point of view, by looking at the mental capacities and mental qualities of the learner. He postulates that there are at least two psychological mechanisms in operation when a subject processes linguistic information: a lexical route that operates on word specific knowledge with a *look-up* or dictionary procedure, and a non-lexical route that operates on grapheme-phoneme conversion rules. Coltheart (1978) predicts that an individual will select the route to word recognition that corresponds to the regularity of the orthographic information in the words. That is, regular or non-words will be processed using the non-lexical route and irregular or exception words will be processed using the lexical route (Coltheart, 1978; Venezky, 1970). Coltheart wrote, "it seems highly likely that the next twenty years of cognitive psychology will be as dominated by the concept of *strategy* as the past twenty years have been dominated by the concept of *code*" (Coltheart, 1978 p.199). Coltheart's non-lexical route is parallel to the phonological awareness instruction and the lexical route will be recognition of sight words prescribed by ***LeapFrog SchoolHouse***.

Coltheart's (1978) idea of reading seems to ascribe equal psychological value to graphemes and phonemes – two items given great emphasis by the ***LeapFrog SchoolHouse*** Reading Program. Elkonin (1973) drew a distinction between graphemes and phonemes where graphemes were characterized as concrete, solid objects and phonemes as abstract and lacking objective reality. The fact that the stream of speech is not easily segmented into phonological units raises a new issue in the quest to identify the process by which linguistic information is acquired. The

notion that phonemes are abstract units that are not readily identified may give way to some other units of language as being the basic recognizable psychological units of words identification. The integral identities of larger sound units including syllables and onsets/rimes are now considered by many researchers to be more accessible to beginner readers (Bryant & Bradley, 1985). Interestingly, specific instructions on how to teach these larger sound units are incorporated in the ***LeapFrog SchoolHouse*** program.

Another way of looking at phonological awareness is to consider Tunmer, Herriman, & Nesdale's (1988) proposal that says children use metalinguistic abilities whereby they reflect on and learn to consciously manipulate the phonological information of speech and apply it to the orthographic information of written language in addition to their linguistic abilities operation that comes automatically and effortlessly, while the linguistic operations of phonological awareness, spelling and reading seem to require the conscious application of strategies and are thus metalinguistic skills. In other words, when a child is aware that a language is actually made up of sounds, and he then consciously applies this awareness in learning or using the language, he is activating his metalinguistic skills, his phonological awareness skills.

If the researcher were to represent this theoretical framework in a diagram, it would look like figure 1.1 below.

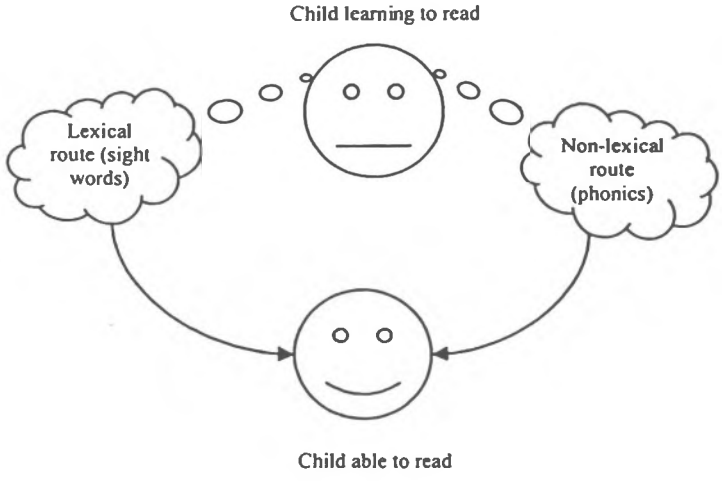

Figure 1.1: Coltheart's Theory of Reading Acquisition

1.3 Some Challenges facing the English Language Learner

1.3.1 Ambiguity

One of the main challenges faced by a child learning to read in the English Language is the nature of the orthography itself. Different descriptions have been given to the English Language – quasi-regular (Plaut and McClelland, 1996), a very irregular system (Bryant and Bradley, 1985), notoriously inconsistent (Barry and De Bastiani, 1997), and capricious (Wagner and Torgeson, 1987). Byrne, Fielding-Barnsley and Ashley (1996) argue that there could be some deep biological and innate structures which play an important part in processing the semantic information found in the morphological and grammatical materials of the English Language. They add that the nature of the English orthography is culturally determined and easily influenced by current linguistic trends.

The spellings of words which have been accepted as correct are fixed in dictionaries and remain largely unchanged. However, the pronunciations and meanings of these words are changing over time through contemporary

usage, phonological shifts in accents and cultural circumstances. Therefore the grapheme-phoneme correspondences remain varied and ambiguous. One reason for this spelling-sound ambiguity was the decision to represent the long **e** sound with the letter **i** known as the great vowel shift during the reign of King Henry VIII (Scholfield, 1994). Due to this move, the grapheme-phoneme correspondences changed unevenly and unfortunately, the confusion it had caused, remain to this day. One experiment conducted by Read (1975) however, demonstrated an interesting finding. Read studied children's initial and spontaneous attempts at representing sounds with letters. He observed that children often revert to grapheme-phoneme correspondences that predate the great vowel shift of the fifteenth century. These reversions were considered by experts for example Henderson, 1980 as an example of Chomsky's thesis that language is innate and emanates from deep morphological structures rather than the relatively shallow, arbitrary and superficial systems of print. This explanation can be applied to Malaysian children who are learning the English Language when they use the letter **k** to represent the sound **/k/** in the word **cat**. This observation was made in the process of conducting this research on phonological awareness among six-year-old children at the Sultan Idris University of Education in 2006.

Another reason for the spelling ambiguity in the English Language is the way in which vowels are modified by the consonants that follow them for example, the /æ/ sound in the letter **a** changes in the following rime families:

CAT /kæt/, MAT /mæt/, HAT /hæt/

CAR /ka/, FAR /fa/, STAR/sta/

BALL /bɔll, HALL /hɔll/, TALL /tɔll/

This example is evident that rimes are functional linguistic units that help to reduce the grapho-phonemic ambiguity in the English Language. The ambiguous grapheme-phoneme correspondences are a major hindrance to the learning of the English Language. This research has managed to throw some light on the ways the ambiguity in the grapheme-phoneme relationship can be reduced and thus contribute to the pedagogical task of teaching reading to young children.

1.3.2 Phonological Awareness

Phonological awareness seems to present some challenge to a child learning to read in the English Language. Phonological awareness is a broad term that includes phonemic awareness. In addition to phonemes, phonological awareness activities can involve work with rhymes, words, syllables, and onsets and rimes.

Phonemic awareness is the ability to segment words and syllables into constituent sound units, or phonemes. Converging evidence from all the research centers under the National Institute for Child Health and Development shows that deficits in phonemic awareness reflect the core deficit in reading disabilities (2000). These deficits are characterized by difficulties in segmenting syllables and words into constituent sound units or phonemes—in short, there is a difficulty in turning spelling into sounds. If a child does not realize that each letter of the alphabet has a sound or several sounds attached to it, then it would take him a longer time to learn to read. If the child is not helped to have this awareness, then he will most likely develop some form of reading disability.

1.4 The Importance of Phonemic Awareness

Children are said to have phonemic awareness when they gain the insight that spoken words are made up of sounds, and they are able to manipulate those sounds (Calfee, 2002). Phonemic awareness happens over time and without this insight, phonics instruction will not make sense to children (Blevins, 1998). The term phonological awareness is sometimes used interchangeably with phonemic awareness, but as the Board of Directors of the International Reading Association (1983) clarified in its position paper on phonemic awareness, there is a difference in the two terms. Phonemic awareness focuses on the smallest units of sound in speech (phonemes), whereas phonological awareness also deals with additional units of sound which are larger than phonemes (syllables, onsets, rimes).

The National Institute for Literacy (2001) highlights the evidence-based research regarding phonemic awareness on its Partnership for Reading Website. Since the Partnership for Reading is devoted to scientific evidence, the researcher believes that there is a high level of assurance that these findings are backed by credible research. According to The National Institute of Literacy, phonemic awareness can be taught and learned. Children can be taught to notice, reflect upon, and manipulate sounds through effective instruction and this conclusion comes about after reviewing numerous scientific research conducted over a period of thirty years. The institute further highlights that phonemic awareness instruction can help all types of students learn to read, including preschoolers, kindergarteners, first graders who are just starting to read, and older, less able readers. Many parties have come to agree that phonemic awareness is the best predictor of early reading success. They also found that phonemic awareness instruction is most effective when children are taught to manipulate phonemes by using the letters of the alphabet. The research that they have

conducted showed that using letters when teaching phonemic awareness enhances children's learning because this type of instruction provides concrete symbols for sounds. The use of letters also facilitates greater transfer to reading and spelling than when instruction is limited to only speech (Holn and Ehri, 1983).

There is also clear evidence that introducing and incorporating letters quickly and directly helps significantly in children's spelling and writing acquisition (Berninger and Richards, 2002). Finally the National Institute for Literacy suggests an approximately twenty hours of class time over the school year as being sufficient time for phonemic awareness instruction. An American child goes through a school year of a hundred and eighty days. This means an average of ten minutes of direct phonemic awareness instruction per day. Many educators believe that phonemic awareness instruction becomes more powerful when it is also interwoven as part of a broader language-rich program that emphasizes the sounds of language. As Doctor Robert Calfee (2002) suggests, clear articulation in which the teacher stretches and exaggerates words to emphasize individual sounds is one of the best ways to reinforce phonemic awareness. This can be done during reading aloud activities, when introducing new vocabulary, spelling lessons, and as a significant part of sound-symbol instruction. Informal talks with teachers reveal that the children strengthen their phonemic awareness through the use of nursery rhymes, tongue twisters, alliterative songs and stories, riddles, and other fun oral activities which focus on speech sounds. These opportunities also represent excellent ways for teachers to be keen observers of children and their phonemic awareness. Ongoing informal assessment leading to appropriate individualized instruction is an important part of the phonemic awareness formula.

1.5 The stages of Phonemic Awareness

Many experts have agreed with the idea that phonemic awareness develops along a continuum. What this means is that, certain types of awareness usually take place before others are possible. Generally, children's abilities will differ broadly, and this should be taken into consideration when giving phonemic awareness instruction. Most educators do not look for mastery of any one level before moving on to the next – they prefer to spiral back to familiar activities repeatedly as new types of learning are addressed. Due to this reason, frequent planned assessment followed by informal instruction is the best way to monitor children's progress. Focused intervention for children who are perceived as at risk can facilitate their progress through these stages. Calfee, Cunnigham and Nathan (2002) have suggested the following stages along the continuum: attending to sounds, awareness of rhyming words, concept of words, awareness of syllables, awareness of onset-rimes, phoneme matching, phoneme blending, phoneme segmentation and phoneme manipulation. The researcher represents the spiral continuum in the following diagram.

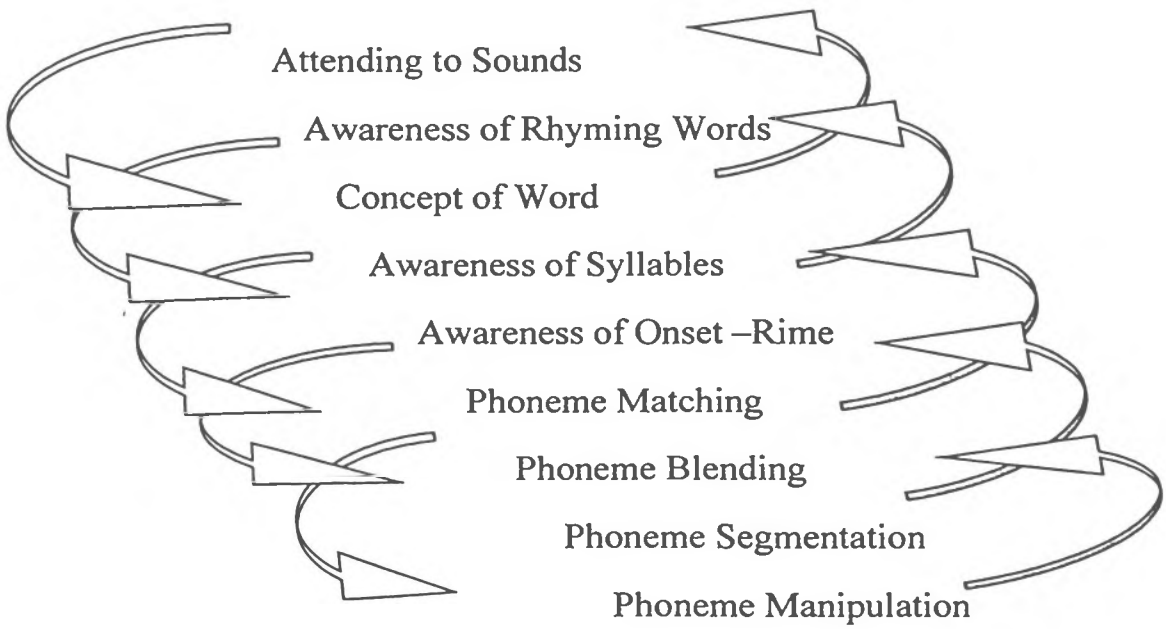

Figure 1.2: The Cyclical Stages of Phonemic Awareness

In the United States of America, a company named ***LeapFrog SchoolHouse Enterprise***, has developed a program aimed at helping children to read. The program focuses on delivering explicit phonological awareness instruction to make children aware of the sounds of the English Language. Once the children are aware of the sounds and the symbols (alphabets) that represent these sounds, they should be able to read these symbols in anyway they are presented to the children. Phonemic awareness comes in nine stages which can be cycled back and forth to suit each child's needs. The researcher has decided to apply phonological awareness instruction to her participants and study the effectiveness of the explicit instruction.

1.6 Statement of the Problem

Children have problem reading primarily because they are not aware that reading entails producing sounds of the text that they are reading. They are not able to decode the sound or sounds that an alphabet represents. Further, they do not see the relationship between the letters of the alphabet and their varied sounds. In short, they do not have phonological awareness. This study is undertaken to investigate the effects of using ***The Literacy Center and The LeapTrack ® Assessment & Instruction System*** on students' independent use of phonological awareness instruction for reading. For the benefit of all readers, the researcher will give a description of ***The Literacy Center and The LeapTrack ® Assessment & Instruction System*** in the following paragraphs.

The ***LeapFrog SchoolHouse*** Program will be used throughout the duration of the research. The program encompasses the ***Literacy Center*** and the ***LeapTrack Assessment & Instruction System.***

1.7 *The Literacy Center*

The Literacy Center is a classroom where the preschool teaching and learning activities take place. In here, the teacher conducts her classes by giving explicit phonological awareness instruction to her young learners and the activities that take place are conducted in a non-formal, fun manner. Among the activities are singing, story-telling, reading aloud, shared-reading, play acting, chanting, and lots of other activities that involve bodily movements. The room is brightly lit, air-conditioned and carpeted. There is a comfortable reading corner where floor cushions are scattered for the children to lie on their stomach and read. There are many story books and children are given the freedom to choose the books they want to read. A puppet theatre is set up at another corner and children get to role play using the puppets. A platform is raised to function as the stage for children to go up and show their talents. And all the walls and pillars are decorated with words and rhymes and jingles to make the center as print-rich as possible. There is also a board where students' works are put up and changed regularly. The ***LeapFrog*** materials found in this center are the ***LeapMat*** learning surface, the ***LeapPad*** platform, the ***LeapDesk*** workstation and the the ***LeapTrack Assessment & Instruction System.*** Each of these items will be described below.

1.7.1 The Cumulative Curriculum

The chart below lays out the curriculum content that the researcher will follow in delivering her phonological awareness instruction.

Table 1.1: The Contents of the Cumulative Curriculum

WEEK	SKILLS	WEEK	SKILLS
1	Attending to Sound	10	Letters That Are Most Difficult to Learn – (H, Q, W, Y)
2	Word Segmentation, Rhyme	11-12	Short A
		13-14	Short, I, A
3	Syllable Blending, Segmentation, Deletion, Onset and Rime	15-16	Short O, I, A
		17-18	Short E, O, I, A
4	Phoneme Matching, Segmentation	19-20	Short U, E, O, I, A
		21-22	Initial Consonant Blends with S
5	Phoneme Manipulation	23-24	Initial Consonant Blends with R
6	Letters that sound like their names start – (B, D, J, K, P, T, V, Z)	25-26	Initial Consonant Blends with L
7	Letters that sound like their names end – (F, L, M, N, S, R, X)	27-28	Initial Consonant Blends with Qu
		29-30	Final Consonant Blends with A
8	Letters That Are Vowels (A, E, I, O, U)	31-32	Final Consonant Blends with L
9	Letters That Can Sound Hard or Soft – (C, G)	33-34	Final Consonant Blends with N

1.7.2 The Two-week Cyclical Program

Each unit of the curriculum content above will be delivered in a two-week cycle. A typical two-week cycle will have the following activities:

Day 1: Introduction:

The teacher gives direct attention to her group of children. This ensures that the teacher connects with each child from the beginning. Working in a small–group setting, the teacher can look directly at each child or ask

questions to know whether a student might need additional instructional support.

Days 2 and Day 3: Practice

Children work at various centers set up around ***The Literacy Center*** learning tools, rotating through them over the course of two days and spending an average of ten to fifteen minutes at each center. Children benefit from the multiple exposures to the phoneme being studied and remain motivated because of the variety provided. The teacher's role here is to monitor and facilitate children's work.

Day 4 – "SAFETY NET" Day

The suggestions for this day can be used at any time, but might be particularly helpful at the end of the first week and again at the end of the second week. Children who might need more work with selected phonemes from the lessons will benefit from the activities described in the instructional plan for this day. The goal is to ensure that no child is left behind, that every child can get the specific extra instruction and practice he or she might need.

Day 1 Week 2:

Direct instruction with the whole class is used to pull children back into the lessons after the distraction of the weekend.

Day 2 & 3 Week 2:

These days mirror Days 2 and 3 in Week 1. Again, the goal is to give children as many exposures to the elements being studied as possible.

Teachers have the opportunity to monitor and facilitate children's work.

Day 4 Week 2:

By providing innovative methods to informally assess children's progress, ***The Literacy Center*** makes evaluation a natural part of the learning cycle. As children engage in stimulating activities, the researcher observes and records notes about their level of mastery. Should children need more instruction, the ***Safety Net*** Day is already built into the learning cycle.

1.7.3 The *LeapDesk* Workstation

The ***LeapDesk*** workstation is like a big keyboard, where the keys are actually alphabet blocks. It is a versatile electronic learning tool that helps assess, teach, and reinforce skills through student-led activities. The ***LeapDesk*** not only speaks the names of the letters of the alphabet but also produces their pronunciations in the context of specific words. Students can also use the light-emitting diode ***WritingPad*** to learn how to write the letters. When an alphabet block is placed in its slot, the ***WritingPad*** lights up showing the shape of the letter. Students can trace out the letter by placing a self-stick paper on the ***WritingPad***. The ***LeapDesk*** offers three modes of operation: Learning, Assessment, and Adaptive Teaching. The teacher controls the mode, but the students can move through the activities on their own. The ***LeapDesk*** workstation comes with ***LeapDesk*** cards. The cards are designed for insertion into the ***LeapDesk*** to achieve different goals. For example, Alphabet Cards use animal characters to teach the names and sound of letters. Sight Word Cards use simple sentences with illustrations to teach thirty beginning-level sight words. Phonics Cards take

the student through a six-level phonics curriculum. Each student is assigned a card and his/her learning and assessment can be personalized, monitored and recorded.

The ***LeapFrog SchoolHouse*** program is built around a systematic way of introducing each skill by following a two-week plan of explicit instruction. This cycle is repeated for all phonics lessons, so that a teacher quickly becomes familiar and comfortable with the experience. This reduces anxiety and shortens planning time. Children, too, come to know that ***The Literacy Center*** time is filled with a certain type of activity. The program is designed to fit within a time frame of thirty minutes daily, four days in a week.

1.7.4 The *LeapMat* Learning Surface

The ***LeapMat*** learning surface is a mat where all the twenty-six alphabets are printed in circles on it. It is an interactive electronic manipulative that helps students learn letter names, letter-sound correspondences, and spelling and blending of simple three-letter words. The ***LeapMat*** can operate in six modes: press a letter to hear its name; find a specific letter, press a letter to hear its sound; find a letter according to the sound it makes; spell specific consonant-vowel-consonant words; create your own consonant-vowel-consonant words. Students will be able to hear instructions which are recorded and played from the mat and they complete the reading task by pressing on the circled letters. If they manage to get a task correctly done, a word of praise like *excellent* or *great* will be heard from the speaker in the mat. If they do not get a correct answer, the recording will tell them to try

again. There is also a HELP button where they could press in order to listen to the instructions repeatedly.

1.7.5 The *LeapPad* Platform

The ***LeapPad*** platform is like a laptop. It is an interactive electronic tool that allows books and skill cards to *talk.* Using a stylus (a magnetic pen connected to the ***LeapPad*** with a wire), students can manipulate the ***LeapPad*** platform to hear entire paragraphs, single words or isolated sounds, to sound out words, and to work through interactive learning activities. The ***LeapPad*** comes with decodable story books and phonics cards. As students work on each item (whether a book or a skill card), their performance can be recorded in a cartridge. This cartridge can then be placed in the ***LeapPort*** (a cartridge reader) for the system to interpret the performance of each child, which can then be printed and filed.

1.7.6 *The LeapTrack ® Assessment & Instruction System*

The LeapTrack ® Assessment & Instruction System is a unique software with a comprehensive system which diagnoses a child's reading level, assigns the appropriate lessons or activities for a particular child to go through, and then assesses his progress. It can also be considered a monitoring program because it is able to record each child's performance as he or she progresses from one stage to another. And the best part of The ***LeapTrack*** is the detailed-documentation on each child's early reading skills which can be printed and filed or posted to their parents. Samples of these print-outs are provided as appendices.

1.8 Problem Question

The primary research question is:-

- How does the use of ***The Literacy Center*** affect students' reading ability?

Other questions that would enlighten me further are:-

- How does phonological awareness help children in their acquisition of reading?
- What is the effect of incorporating direct phonological awareness instructions on students' independent reading?
- How good is ***The LeapTrack ® Assessment & Instruction System*** in furnishing the teachers, parents and administrators with detailed and specific reports on students' reading performance.

1.9 Purpose of the Study

The purpose of the study is to seek evidence to justify the effects of ***The Literacy Center*** on students' independent use of phonological awareness in reading and evidences that will support the effectiveness of the ***LeapTrack ® Assessment & Instruction System*** as a standard assessment tool for preschools.

Students should be given appropriate ideas in order to develop into strategic readers. They should be helped to activate phonological awareness so as to become lifelong readers. The ultimate goal is that these children become strategic readers who can read as many words presented to them and think about what they read in order to make meaning from the text. This study aims at making children enjoy reading so much so that they will be engaged in reading on their own, and at all times. They should know that they can gain meaning from different types of texts and that there are strategies to apply when they are confronted with difficult texts.

They should be able to see their own progress over time and set goals for themselves.

1.10 Significance of the Study

This study will provide the researcher with useful information on the critical issues that reading teachers would have to be aware of when teaching young children to read. When reading is hampered, there is no more joy in pursuing it. Instead, reading becomes a burden that takes too much of the readers' energy. When this happens, children give up reading altogether and this, in turn, will have a negative effect on their lives later. Children will grow and experience different phases of their lives, and through out their development, they will most certainly have to do a lot of reading.

Effective reading instruction is built on a foundation that recognizes that reading outcomes are determined by complex and multifaceted factors. On the assumption that understanding the importance of reading can move public discussion beyond the polemics of the past, the researcher would like to make it an important goal of this research to make the basic foundation for reading in English known: that the initial steps in teaching reading would be to make the children aware of the different sounds in the English Language. Perhaps then she will be able to make those who read her report understand that children need to be explicitly taught how sounds are represented alphabetically. With this knowledge, teachers and instructors can think about successive instruction for teaching reading.

Much research has gone into addressing the different categories of words and how they affect children's error rates and response times (Bauer & Stanovich, 1980). Words are categorized as regular, irregular, consistent, inconsistent, exception,

ambiguous, unique etc., depending on the nature of the letter-sound correspondences. Therefore, this study is highly significant because the researcher is able to accumulate data that has helped her decide upon the best strategy to employ when teaching young children to read. She feels that the best strategy would be to start from the basic elements of reading, namely phonemic awareness. Failure to grasp that written spellings systematically represent the sounds of spoken words makes it difficult not only to recognize printed words but also to understand how to learn and to profit from instruction. If children cannot rely on the alphabetic principle, word recognition is inaccurate or laborious and comprehension of connected text will be impeded.

Another interesting matter worth bringing up is the fact that Malaysian children are learning English Language as a second or third language; the first being the language which the child was born into. By conducting this study, the researcher is able to develop a better understanding of second language learning. Would the children's first language be helping or hindering their learning of a second language? In either case, some form of relationship between the children's first and second language is present and perhaps a teaching module to help Malaysian teachers teach reading in English more effectively can be designed.

The current research is designed to examine and evaluate the effects of using ***The Literacy Centre*** which incorporates the effects of sound categorization, and grapheme and phoneme variance on the acquisition of reading among six year old children. This research seeks to extend and build on the existing research by looking at how explicit phonological awareness instruction helps in the reading acquisition of these children. This research takes place in the context of phonological awareness instruction as the research is based on the premise that

phonological processing is the core deficit in reading acquisition. Phonological awareness is understood to be the primary or causal deficit while deficits in other processes are considered as secondary or contributing factors.

1.11 Definition of Terms

For the purpose of doing justice to the ***LeapFrog SchoolHouse***, the researcher would like to adopt the definitions that ***LeapFrog SchoolHouse*** had used specifically in its training modules:

Blending:

> Combining individual phonemes to form words (phoneme blending); combining onsets and rimes to make syllables; combining syllables to make words.

Explicit phonological awareness instruction:

> Direct instructions in the relationship between a sound and its placement in a sentence, word, or syllable, followed by asking children to use the knowledge on their own. (Example of teacher's explicit phonological awareness instruction – "The words monkey, man and mouse all begin with the sound **/m/**: **/mmmʌŋki/**, **/mmmæn/**, **/mmmaus/**. What sound do you hear at the beginning of **/mæp/**? Do **/mæp/** and **/sæt/** begin with the same sound?

Fluency:

> The ability to read a text accurately and quickly; often includes the related skill of reading with proper intonation.

Onset:

> The onset of a syllable is its initial consonant(s)

Phoneme manipulation:

> Working with phonemes in words (blending phonemes to make words,

segmenting words into phonemes, deleting phonemes from words, adding phonemes to words, substituting one phoneme for another to make a new word)

Phonemic Awareness:

The ability to hear, identify and manipulate individual sounds – phonemes – in spoken words.

Phonics Instruction:

The teaching of reading and spelling in which emphasis is placed on learning the sounds that individual and various combinations of letters represent in a word.

Phonological Awareness:

A broad term that includes phonemic awareness. Phonological awareness activities can involve work with rhymes, words, syllables, and onsets and rimes.

Rhyme:

A word which has the same last sound as another word.

Rime:

The rime of a syllable is its vowel(s) and any subsequent consonants in the syllable.

Segmentation:

Breaking words into individual phonemes, words into syllables, or syllables into onset and rime.

Text Comprehension:

The understanding of what is read, and the ability to connect reading with previous life experiences.

Vocabulary:

Refers to the words students must know to communicate effectively. Includes listening, speaking, reading, and writing vocabulary.