

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes the methodology involved in gathering information concerning the effectiveness of CBI in literature-based reading classes. It discusses the sampling that includes the description of the subjects and a brief description of the English Language teachers. It also provides information on instruments used in this study, the content-based activities, the tests and the methods of data analysis.

3.1 Sampling Framework

This research focused on the students' understanding of a single text where the CBI activities designed by the researcher were the indicators of their understanding. As such this study only scrutinized the use of CBI for Year 6 students based on a single prescribed text, a storybook 'Clever Katya' by Julia Donaldson. This method of study was tested on Year 6 students of an urban Primary School in Kuala Lumpur. Therefore in order to assess the effectiveness of CBI in the literature-based ESL classes the primary school that had implemented

the programme in Year 6 was identified. It was also necessary that the school identified still possessed copies of the text materials to be used during the study.

Before conducting the study, approval from the Wilayah Persekutuan State Education Department was obtained. Sekolah Kebangsaan Taman Desa, located in Kuala Lumpur met with the researcher's requirements that is, the requirements mentioned above. The researcher interviewed the head of the English Language Panel who was in charge of the literature programme. The Researcher with her assistance visited the Year 6 classes and met up with Year 6 English Language teachers before carrying out the research. Through the head of the English Panel the researcher also came to know that this primary school used classroom activities based on the text read in the ESL reading classes in a limited scale though the literature programme which was introduced in 2004 in Year 4, 2005 in Year 5 and 2006 in Year 6.

According to the Year 6 teachers from the school, reading of the text in the reading classes were not carried out on regular basis, which was ideally deemed to take place once a week in the Year 6 English classes. This was due to time constraint, whereby the teachers had to prepare students for the UPSR examination which is usually held in September. The reading classes were conducted regularly after the UPSR examination was over. Then reading was done with the text materials or storybooks which had been allocated to the school. The researcher, upon further discussion with teachers, came to know that teachers had used a workbook based on two of the prescribed storybooks in Year 6. The workbook was commercially published and sold to schools.

The school had 15 copies of the prescribed text 'Clever Katya'. These were the number of copies allocated by the State Education Department to the school. As such the total number of texts would accommodate shared reading in pairs in a class totalling not more than 30 students. The texts would be used in the classes on a rotation basis and no students were allowed to borrow or take back the texts back home.

3.1.1 Subjects

There were a total of 78 Year 6 students who had all finished their UPSR examination, who could qualify to participate in this research. Upon further discussion with the Year 6 teachers and the Senior Assistant of the school in charge of student affairs, it was understood that 14 students would not be able to be involved in the study even though the UPSR examination was over. These 14 students had to attend other assessment at religious schools and some had to represent the school in some other activities, away from the school vicinity. Another 4 students were not recommended to be involved in the study as they hardly attended school after the UPSR examination. The researcher confirmed through discussions with the three Year 6 teachers that 60 subjects participating in this study, had been earlier exposed to reading other prescribed literary texts of the Literature Programme while they were in Year 4 (two storybooks), and Year 5 (two storybooks) before this study was carried out. The 60 subjects were grouped into two groups. In this quasi-experimental study the control and experimental groups were non-equivalent groups, following the concept of non-equivalent control group design (Forzano, 2008:

282-3). In this design, the subjects are not chosen randomly. However, the researcher conducted statistical analysis based on the ideals of quasi-experimental study (Creswell, 2008).

3.1.2 Selection of English Language Teachers

There were three English Language teachers who taught the three Year 6 English classes in the school. All three teachers were responsible in carrying out the literature-based reading programme in the three Year 6 classes in the school. There were vast differences in the years of teaching experiences and some common exposure to courses attended in the Children's Literature Programme for Malaysian Primary Schools since the programme was implemented from 2004. Therefore, the three teachers were requested to fill up a checklist (see Appendix 3.0), so that the researcher upon knowing details of their qualification, working experiences and course participation, was able to choose two teachers to be involved in the study. After the three English teachers completed the checklist (see Appendix 3.0 for Checklist), two teachers were selected. These two selected teachers who had attended Year 6 literature programme workshops and with experience in teaching Year 6 reading classes were assigned to teach the two groups.

With the help of both teachers the researcher fixed a one period English lesson in a week for the two groups, over a period of 5 weeks. The subjects in the control group were taught by one selected teacher without any CBI activities and the experimental group was taught by another selected teacher using CBI which was in the form of 10 instructional task-based

activities. The role of the teacher was to be an instructor and facilitate the reading class while promoting reading and learning via the use of task-based activities. She was to be a listener, and a guide in promoting content towards target language acquisition in natural, risk-free, enjoyable and challenging environment through interaction and communication. The storybook 'Clever Katya' was the tool to the teachers that provided content with layers of multiple meanings and text patterns in both literature and language in the CBI, Year 6 reading classes.

3.1.3 Instrumentation

To gather data for the study eight sets of instruments, namely a checklist, 3 questionnaires and 3 tests were employed. The tests were the main instruments of the study and questionnaires were used to verify the data. The instruments included a checklist which was used to gather demographic information for selection of teachers to participate in the study. Three questionnaires were used to measure participants' beliefs and attitudes towards reading English storybooks, past learning experiences in reading classes and the effectiveness of CBI.

A pretest before treatment and two posttest after treatment consisting of multiple choice questions were employed to the subjects who used CBI (experimental group) and those who did not use CBI (control group). According to Shang (2006), to test the students' understanding of the content of a text, vocabulary and reading comprehension, variety of instruments such as written test, true or false statements and multiple choice questions could be used to help assess students' English and content learning.

The sequence of the instruments used in accordance to the procedure in this study were

Before CBI (before treatment):

- 1) Checklist (Appendix 3.0) to Year 6 English Language teachers
- 2) Pre-reading Questionnaire (Appendix 3.1) to all Year 6 students
- 3) Pretest (Appendix 3.2) to 62 participants from Year 6 (only 60 considered later)
- 4) While-reading Questionnaire (Appendix 3.3) to 30 subjects in the experimental group.

During CBI (during treatment or 5 Reading CBI lessons)

- 5) 10 CBI, task-based activities with teacher's guide (Appendix 3.4 (1) to (5))

After CBI (after treatment):

- 6) Post- reading Questionnaire (Appendix 3.5) to experimental group
- 7) Posttest (Appendix 3.2) to control and experimental groups
- 8) Posttest (Appendix 3.6) to control and experimental groups

It is explained earlier in this chapter that the checklist was used to gather information from the English Language teachers before the research was carried out. This was to overcome any form of discrepancy in the choice of teachers selected to teach both the control and experimental groups over a period of 8 weeks.

3.1.3.1 Questionnaires

There were altogether three questionnaires in this study.

1. The first questionnaire the Pre-Reading Questionnaire (see Appendix 3.1) was administered to all students in Year 6, who were all 12 years of age, learning English in Year 6 classes.
2. All these students were the selected participants whose level of English was of mixed ability.
3. The questionnaire was in English.
4. However no high level terminology was used.
5. The items in the questionnaire were made easy and simple to be understood by students in a primary school.
6. This questionnaire employed a Delineation Scale (Strongly agree, Agree, Not sure, Disagree and Strongly disagree).
7. This questionnaire comprised 10 items to gather information regarding students' attitude and preference towards reading English storybooks.
8. The items were designed in a selected-response format where respondents had to circle one response from a five point Likert Scale.

The first questionnaire (see Appendix 3.1) served several purposes apart from the main purpose aimed at finding out about students' attitude towards reading English storybooks. A breakdown of the first questionnaire and the functions are given as follows.

Table 3.1
Students' attitude towards reading English storybooks

No	Items	Purpose
1	I like reading English storybooks	To gain insight of students' liking to reading English storybooks
2	I enjoy reading English storybooks in the class	To gain insight of students' reading experiences in literature-based reading class.
3	I find the English storybooks read in the class easy to read	To gain insight of students' ability to read the prescribed storybooks
4	I like to read aloud storybooks in the class	To gain insight of students' attitude toward reading aloud in the class.
5	I enjoy the activities that I do in the class based on the storybooks	To gain insight of students' attitude towards activities done in class based on storybooks
6	I understand the story I read in English better in the class	To gain insight of students' understanding of a story read in the class
7	I can tell the story I read on my own, in English, in and out of the class	To gain insight of students' own ability to retell a story in English in any circumstances
8	I would like to read more than two English storybooks in the class in a year	To investigate students' preference to number of English storybooks read in class, a year
9	I read at least one English storybook a month on my own	To investigate students' interest in reading English storybooks based on a minimum, 1 book a month
10	I borrow one English book a month from the school library	To investigate students' interest of borrowing English books from school library

The researcher personally handled the administering and collecting of the questionnaire. This was to ensure a one hundred percent return and answering of the questionnaire. The

questionnaire was completed by all students of Year 6. All students completed the questionnaire at the same time in the school hall. Since the students were young learners, the researcher read the questionnaire in order to ensure each item in the questionnaire was understood and completed within the time allocated to the researcher by the school administration. This was in a way to help the Year 6 students who might be struggling readers of English. As such the headmistress of the school requested all Year 6 teachers to be present in the hall while the first questionnaire was administered by the researcher to the students.

The second questionnaire, (see Appendix 3.3 for While-Reading Questionnaire) which was meant only for the experimental group, was for the purpose of finding out the subjects attitudes towards speaking English, reading storybooks, and their past experiences involving activities in the reading classes during the intervention of CBI. In this way, the researcher would be able to gather more information about the subjects involved in the experiment.

The third questionnaire which was the Post-Reading Questionnaire (see Appendix 3.5) was only completed by the experimental group which was to gather information regarding the effectiveness of content-based activities done in the reading classes during the study. The control group did not complete the While and Post reading questionnaires since they did not take part in the CBI activities. This questionnaire was also used as an instrument to evaluate students' understanding of both the aesthetic and language aspects learnt through each CBI lesson and activities done in the reading classes or during treatment. While this questionnaire was read out the researcher had to show the instructional task-based activities one by one in order to remind the subjects the different CBI activities done during the 5 weeks of treatment. At

the same, time these two questionnaires (Appendix 3.3 & 3.5) were completed by the subjects with the presence of the selected teacher who had facilitated CBI lessons and the researcher.

3.1.4 Procedure

There were a total of 78 Year 6 students from three different Year 6 classes in the school. Fourteen students were hardly in school as they were attending other activities and examination out of the school during school hours. Remaining 64 students, inclusive of the ones who had problem with school attendance answered the first questionnaire (see Appendix 3.1 for Pre-Reading Questionnaire).

After completing the questionnaire (see Appendix 3.1) the students were sent back to their classes and all students in their respective classes were to read the prescribed text or storybook 'Clever Katya' through shared reading. The reading was done with the three English teachers who have been teaching English in their respective Year 6 classes. These teachers taught reading using their own classroom strategies (traditional way) or teaching reading without using any form of CBI before the students sat for a pretest. The researcher also presumed most probably, that apart from these shared reading the students would have been somehow exposed to the text in the earlier part of the year, if the programme had been implemented accordingly in Year 6.

Only 62 students sat for the pretest as two students were absent on the day the pretest was given. The pretest was to ascertain the 62 participants reading ability and the selection of students to be subjects in either the control or experimental group. The pretest focused on both literature and language aspects of the prescribed text read. Based on the results of the pretest scores, 30 students out of 62 students were assigned as subjects of the control group. These 30 students in the control group were students who had high and medium high scores in the pretest results. They were subjects who were of high level reading proficiency. Another 32 students were assigned as subjects of the experimental group. These 32 students had medium and low scores in the pretest results. This research thus included one control and one experimental group. It was necessary to explain that in experimental research, subjects were to be divided across groups in a way that two groups are of equal strength. In this study the control group was stronger, it was insisted by the school that the better group should be left out, through authority. The researcher had to adhere to the authority's advice and consideration. The researcher felt in such a situation, the study met up with realistic class and school level needs to overcome reading difficulty among second language minority students

In the first two weeks of the CBI lessons, 2 subjects in the experimental group were frequently absent from school. With the advice given by the school authority, the researcher did not involve the 2 subjects that had problem attending school. Therefore the number of subjects in the experimental group totalled up to 30. Within these 30 students although 2 students had mild autism, upon advice by school authority were accepted to be in the experimental group. The selected teacher for the CBI class was given guidance by the researcher through face to face discussion and written guidelines for each activity to be conducted (see Appendix 3.7) for the

experimental group. One class (control group) underwent reading using the traditional way or the usual way in which the teachers had conducted reading lessons using their own classroom strategies and the other class of students (experimental group) using CBI underwent reading with the selected teacher by the researcher.

The study was conducted for a prolonged period of about 8 weeks. 5 weeks to conduct the reading classes which involved ten CBI activities whereby two different activities were exposed in a single period of 40 minutes. Another 3 weeks was necessary for completing checklist by teachers, questionnaires and test by subjects. The 8 weeks was from the month of September a week after the UPSR examination was over, till the second week of November 2008, a few days before school closed for the year. As the purpose of the study was to find the effectiveness of CBI used among students of Year 6 literature-based ESL reading classes in an Urban Primary School, the quantitative method was employed with only two groups, in which one was experimental group and the other non-equivalent control group using (Forzano, 2008) using pretest and posttest.

After the tenth CBI activity, the subjects of the experimental group and control group were given a posttest whereby the posttest was the same test used as the pretest and another posttest was given to validate further the reliability of the earlier posttest findings. Before each test was carried out an interval of 2 weeks was given. Data for the study came from two literature-based ESL classes, one comprising of subjects of high level reading proficiency (control group) whereby they were identified through their pretest scores and the other consisted of medium and low proficiency level in reading (experimental group) who were also identified

through the pretest scores. Both classes were exposed to the prescribed storybook ‘Clever Katya’ which was one out of the two prescribed literary text for Year 6 classes in five states nationwide.

3.2 Content-Based Instructional Activities

The subjects of the experimental group were exposed to ten different content-based instructional activities for a period of five weeks. The instructions were made simple and easy and the subjects had to explore the text in order to gather information or search for answers using the text. They were allowed to read and refer to the storybook while the content-based activities, in the form of simple instructional tasks (see Appendix 3.4 (1) to (5)) were given. Usually the tasks were either completed through group work, pair work or whole class interaction. The subjects were given opportunities to discuss their findings and relate the pages in which they had found their information or answers to the task given to them in a challenging and enjoyable manner. Error detection and correction were encouraged as natural responses from students to encourage communication via speaking aloud and natural responses.

Since it was a reading class, the subjects were encouraged to speak out and read aloud their findings rather than giving much attention to writing. Though writing was done, it was in the form of words, phrases or lexical structures related to language aspects or it was in the form of similes or occurrences, such as alliteration which were of aesthetic or language aspects. The tasks were all confined to the contents of the book.

To make CBI interesting the tasks involved interpretation of graphics and pictures from the text. This was to help subjects to use picture cues to solve interesting language or literary tasks such as word puzzles and story- mapping, on their own. To ensure most pages of the book was explored through the use of CBI, the ten activities involved the search for information or answers from the front to the back cover of the book. The activities involved pre, while and post-reading activities, involving subjects with the four language skills that were listening, speaking, reading and writing. Much emphasis was on while and post-reading activities rather than pre-reading activities because it was understood by the researcher that the teachers had at several occasions used the prescribed text in the reading classes. Moreover, the subjects had been already exposed to the text earlier.

3.3 Tests

The tests administered were the pretest (see Appendix 3.2) and the posttest (see Appendix 3.6). The questions were focused on both literary and language aspects based on the content of the prescribed storybook for Year 6, 'Clever Katya'. The pretest was also used as a posttest after treatment. Another newly devised posttest was used to measure the effectiveness of CBI in the understanding of both aesthetic and language aspects. The subjects were tested using multiple

choice questions in objective form as the subjects were tested based upon their knowledge gained from the understanding of the context consisting of both aesthetic and language aspects. Assessment of CBI can be a problematic component, and yet it is critical that instructors evaluate students' learning, besides, designing authentic and interactive content-based assessment is required as students in CBI are expected to "complete discourse level tasks" (Kasper, 2000:19).

There were 10-sections in the 50 item pretest (Appendix 3.2) of which 25 items were based on the literary (aesthetic) aspects of the content and another 25 items were based on the language aspects found within the content of the storybook. The researcher herself set the items for the pretest and posttest which was face validated in the area of language testing. The researcher made sure the content of the test itself consisted of vocabulary, syntactical and lexical structures that derived directly from the text used during the study in the reading classes. The first 25 items were of aesthetic aspects, based on sequence of the story, characters, theme, plot and setting. The other 25 language items tested the students' knowledge based on language features embedded within the content of the text such as prepositional clause and opposites. In fact Carter and Long (1991:166) had argued that typical literature examination questions did not reflect by integrating language and literary work; that integrated language and literature class can be adapted to foster more activity-centred examination questions directed towards students' own responses to, and readings of literary texts.

All subjects involved in the study were given an hour to complete the test. The English teachers helped to administer the tests to the two groups of students together with the researcher. The researcher had to adhere to the request of the administration as it was upon the advice from

the board of administrators and the Head of the English Panel, from the school that all students were requested to take the test in the hall at one go. All tests were graded and tabulated by the researcher. Students were asked to use pencils and erasers so that they might be able to make changes easily when they were attending the test.

The aim of the pretest (see Appendix 3.2) was first to evaluate the scores of the 62 participants (than of which only 60 were considered) and to assign them to their respective groups. The pretest was then used as a posttest after 5 CBI lessons were conducted. The scores of the test would be able to measure the effectiveness of CBI in the student's understanding of both the aesthetic and language aspects of the text. Another newly devised posttest (see Appendix 3.6) was used 2 weeks after the earlier posttest was completed by all subjects who were involved in the study.

3.4 Reliability and Validity of the Questionnaires

In order for the data to be reliable, several factors were taken into consideration. First and foremost the items in all questionnaires were made sure to be not ambiguous and unclear to the participants or subjects in this experimental study. Therefore each item was constructed to indicate one or a single concept or construct. The first two questionnaires did not pose any difficulty but the Post-Reading Questionnaire with 20 items to measure the effectiveness of CBI in which 10 items were constructed for the understanding of both aesthetic and language aspects

and another 10 items were to measure the effectiveness of CBI. However the 20 items could be reduced to 6 factors following Principle Component Analysis (PCA).

3.5 Analysis of Data

All the data gathered from the 3 questionnaires were analysed using the frequency count technique and percentages. The main objectives of the first 2 questionnaires (see Appendix 3.1 & 3.3), were to gather information, on students' attitude towards speaking, reading and learning experiences in the reading classes. The post-reading questionnaire (see Appendix 3.5) was to provide valuable information towards identifying the effectiveness of the understanding of both the aesthetic and language aspects of CBI in the literature-based reading classes.

For the post-reading questionnaire which consisted 20 items related to the understanding of aesthetic and language aspects, the researcher attained a 6 Factor Analysis design so that all 20 items could be seen in small number of factors as there was a command bond in the way the respondents responded to the items. After the data were tabulated the significance of the responses were discussed. The findings from the questionnaires were used to triangulate the data obtained from the 3 tests. The raw scores of the respondents were analysed using SPSS for Windows Version 16.0.

The analysis of the test scores included frequency counts, percentages, means and standard deviations. Frequency counts percentages were used to ascertain the number of times particular item occurred and the number of values out of total of 100 respectively. The means

showed the arithmetic average of a set of data. It was commonly used and most widely applicable measure of the central tendency of a distribution whereas the standard deviations showed how far the other values deviated from the mean.

3.6 Summary and Conclusion

This chapter discussed the research methodology adopted by the researcher to find answers to the research questions posed in chapter one. It discussed the sampling framework, subjects, selection of teachers, the instruments and activities used throughout the study. The first questionnaire completed by all Year 6 students before the study was conducted had been discussed in this chapter. It also discussed the two questionnaires completed by the subjects from the experimental group, during and after the study. The CBI activities as well as the three test and the methods of analysing the data relevant to this study had also been discussed.