# Chapter Three

### INSTRUMENTATION AND METHODOLOGY

### 3.0 Introduction

In this chapter, the major areas related to instrumentation and methodology presented are as follows:

- 3.1 the instruments used to collect information on emergent literacy skills of preschool children and parent involvement
- 3.2 the subjects selected for participation in this study, and
- 3.3 the procedure employed.

# 3.1 The Instruments

Two instruments were used to collect data for this study. They were a reading and language inventory and a parent interview schedule. The first instrument (Appendix 1) was a seven-item test to measure emergent literacy skills of the twenty children of this study. This instrument was modified and adapted from the Bader Reading and Language Inventory (1983). The Bader Reading and Language Inventory contains a range of informal tests to observe and assess reading performance and language facility of preschool children.

Humphrey-Cummings (1982) found that five tasks from the Inventory discriminated between children who could read and those who could not.

They were naming letters, learning letter names in words, syntax matching, writing letters of the alphabet and spelling.

The selected tasks in this reading and language inventory included:

- (i) oral letter production
- (ii) letter recognition
- (iii) letter identification
- (iv) letter writing
- (v) name writing
- (vi) hearing letter names in words, and
- (vii) environmental signs and labels.

The second instrument, (Appendix 2), an interview schedule, contained 27 semi-structured questions and was divided into 6 sections.

The purpose of each section was to gather information from the parents on:

Section A: Background information (Items 1 - 7)

Section B: Material resources in the home (Items 8 - 13)

Section C: Parents' literacy practices in the home (Items 14 – 19)

Section D: Parents' literacy practices outside the home (Items 20 –22)

Section E: Children's literacy activities in the home (Items 23 – 25)

Section F: Parents' leisure activities (Items 26 –27)

A pilot study was carried out at a kindergarten in a residential area of lpoh to examine the appropriateness of the items found in the reading and language inventory and to find out how much time the children would take to complete the reading and language inventory. It was important for the researcher to find out whether the instructions given were too difficult for the children to comprehend.

Two children were selected at random to do the reading and language inventory. The researcher attempted to find out if the children had difficulty in comprehending the oral instructions given by the researcher, the sequence and the completion of the given tasks. The children were tested individually.

After the two children had been tested, their two parents were interviewed using the parent interview schedule. The researcher was interested to find out if the interview schedule was appropriate and easy to comprehend. The time needed to complete the interview schedule was also noted.

On the basis of the oral feedback from the parents and the findings of the pilot testing, amendments were made to the two research instruments. Instructions for the reading and language inventory were simplified and four new items were added to the parent interview schedule to elicit information on material resources and parents literacy activities in the home.

For content validation of the two instruments, expert advice was sought from Professor Dr. Chiam Heng Keng, a lecturer in Early Childhood Education from the Faculty of Education of University of Malaya.

# 3.2 The Subjects

The subjects of the study consisted of twenty 5-year-old children. These children were attending a preschool class in a kindergarten in Ipoh. The subjects were purposively selected through a two-phase procedure. Initially, the class teacher was asked to randomly select 20 children out of a class of 38. The 20 children were then tested by the researcher using the reading and language inventory in a one-to-one situation to obtain their scores in emergent literacy skills. The children's scores were then used to answer the research question on levels of emergent literacy skills.

Table1: Distribution of Subjects by Age and Race

			N	%
Sex				
	Male		7	35
	Female		13	65
	a his happen and a state of the	Total	20	100
Race				
	Chinese		13	65
	Indians		5	25
	Others		2	10
	Annual order of the state of th	Total	20	100

Table 1 presents the distribution of the subjects by age and race.

The 20 subjects were made up of 7 boys and 13 girls. There were 13

Chinese, 5 Indians and 2 children of mixed parentage. These children came from small families having one to four children.

To answer the research questions on material resources that parents provide for their children, parent activities and role model, only 10 children consisting of 5 children with the highest emergent literacy scores and 5 children with the lowest emergent literacy scores were selected out of the initial 20. This basis is used to select the 10 parents as subjects to study parent involvement in emergent literacy skills.

Table 2: Background of Children

Child	Sex	Race	Father's Occupation	Mother's Occupation
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Dick	М	Mixed	Parking attendant	Housewife
Olin	F	Mixed	Technician	Housewife
Yin	F	Chinese	Businessman	Clerk
Sue	F	Chinese	Farmer	Clerk
Mike	M	Chinese	Salesman	Housewife
Chris	F	Chinese	Salesman	Secretary
Yun	F	Chinese	Business	Business
May	F	Chinese	Salesman	Housewife
Devi	F	Indian	Lorry driver	Housewife
Zac	М	Chinese	Business	Business

F - Female

M - male

Table 2 shows the background of the 10 children with the highest and lowest scores in emergent literacy skills. The 10 children were made up of 3 boys and 7 girls. There were 7 Chinese and 1 Indian and 2 children of mixed parentage.

# 3.3 The Procedure

Data collection in this study was obtained using the two instruments.

The first set of data is collected from the 20 children, using the reading and language inventory. The second set of data is collected from the parents, using the parent interview schedule.

The researcher was introduced to the class in which the 20 children were purposively selected. The researcher participated in some of the class activities and after the third day, the researcher took over the class for a few sessions. This was to familiarise the children with the researcher to facilitate data collection. Then, when the children had interacted well with the researcher, testing of the selected children began.

The purpose of the testing the children was to obtain their scores in emergent literacy skills. A child was asked to go to the library where he/she would be tested using the reading and language inventory. The children were tested on:

- A. Oral letter production. A child was asked to sing or recite the ABCs.
  The researcher noted whether the child sang or recited the ABCs fluently, hesitantly or could not do so.
- B. Then, letter recognition was tested by presenting the uppercase letters in scrambled order and asking the child to point to each letter as the researcher named it. The same procedure was repeated for lowercase letters. The order of letters was the same for all the

- children for letter recognition, identification and writing. The total number of correct letter recognition was recorded.
- C. Letter identification. The child was asked to say the name of the letters as the researcher pointed to it. The researcher began with uppercase letters followed by lowercase letters. These letters were also presented in a scrambled order. The total number of correct letter identified was recorded.
- D. Letter writing. The child was given a sheet of paper and a pencil.

  The researcher then asked the child to write the alphabet in uppercase as the researcher read out the letters one by one. The same procedure was repeated for the lowercase letters. The number of letters written correctly was also recorded.
- E. Name writing. The child was then asked to write his name on a piece of paper. The name writing was recorded according to 'initial letter', 'nearly correct' or 'correct'. 'Nearly correct' and 'correct' are recorded as accurate writing and 'initial letter' is considered as inability of the child to write his name. A child was awarded 0 mark for 'initial letter', 5 marks for 'nearly correct' and 10 marks for 'correct' name writing.
- For the hearing letter names in words, the researcher pronounced 8 words and the child was required to tell the researcher the first letter heard in the word. The number of correct responses was also recorded.

G. Environmental signs and labels reading. Each child was shown eight environmental signs and labels in logo which were cut from advertisements in colour. The signs and labels were "Jusco", "Milo", "McDonalds", "KFC", "Gardenia", "Mickey", "No Smoking" and "Mariaville". Since 'Mariaville' is the name of the kindergarten, the researcher felt that the children should recognise it, having seen the word on their kindergarten building, fence, board books and badges. The child was asked to respond to what was shown. The child's responses were recorded as category correct (cc) if the answer is close. (for example 'bread' for 'Gardenia'.) Word correct (wc) was used to denote accurate recognition. In a later session, the child was shown the same words typed in standard print on cards and presented in a random manner. The same designations 'cc' and 'wc' were used.

The 20 subjects were tested over a period of ten days. The researcher visited the kindergarten in the afternoons and tested them whenever it was convenient to avoid disrupting their lessons. Since there were 7 tasks in the reading and language inventory, the researcher also made sure that no child was given more than one task at any session to ensure that he or she was not bored. All the 20 children were tested on the same task before proceeding to the next task. Play time and recess were not used to test the children. The children were given some reward in the

form of stickers, colour pencils, erasers or pencil boxes at the end of each test session.

After the 20 subjects had been tested, their emergent literacy scores were scored to measure their levels of emergent literacy skills. The second part of the data collection require the identification of 5 children, that is 5 with the highest emergent literacy scores and 5 with the lowest emergent literacy scores. The parents of these 10 children were selected to obtain information on parent involvement.

After the 10 children had been identified, the researcher sent a letter to the parents asking for permission to interview them in their homes at a time convenient to them. An appointment was made with each parent.

In the interview, the researcher explained that the aims of the interview were to gather information on material resources, parent literacy practices in and out of the home, children's literacy activities and parents' role (Appendix 2). After establishing rapport with the parents, the researcher obtained background information of the parents and children. Permission was sought before recording the interview session on cassette tape. The researcher followed an interview schedule but used prompts and follow-up questions when necessary. The interview session took about forty-five minutes.

Two weeks were used to interview the 10 parents. The face-to-face interview was conducted by the researcher. The interview was audio-recorded and after the completion of the interview, it was transcribed. Notes

taken down during the interview were also recorded. The notes were then compared with the transcripts to ensure accuracy of the data collected.