

## **Chapter 3**

### **Research Methodology**

The methodology for this research was determined by the overall purpose as expressed in the research questions described in Chapter 1:

- 1) How do test scores reflect the effect of the language of instruction on children's learning achievement in school;
- 2) How does classroom interaction demonstrate the effect of the language of instruction on children's experience of learning in school?

This chapter is devoted to discussion of the research methodologies used for the current study. It covers the preparation stage, data collection techniques, data analysis, and a brief description of limitations and evaluation of the chosen methods.

#### **3.1 Preliminary Research**

In order to provide evidence based on the real situation, the researcher carried out the in-depth collection of information by field work. This section describes two important tasks carried out in advance of data collection. Preparation for data collection was made by doing preliminary research and consulting with the resource persons for selecting the sites. In this way, the researcher made sure to have suitable and sufficient information before the research trips.

##### **3.1.1 Library research and internet research**

To gain understanding of the issues involved much research was carried out using library resources and internet websites. The research drew on the international literature and research in regard to medium of instruction, mother tongue use in education, bilingual and multilingual education. This includes the most relevant research on mother tongue first education in minority language communities from other international contexts. Library research was done by looking at case studies of minority education from other countries and understanding the related key concepts such as: mother tongue (MT) or first language (L1), national language or second language (L2), medium of instruction (MOI), monolingualism, and bilingualism, to be able to consider the situation of the focus language community. Internet research

was also done since books or articles with background information about the community are not available in print. Therefore, to be able to do the analysis in an effective way, firstly the researcher studied case studies and theories which are related to the research topic. To collect the data, questions which had been used by other researchers were used as a guideline and modified according to what she wanted to know in the villages.

### **3.1.2 Preparation for data collection**

Since there are tight restrictions on doing research on education in Myanmar, the researcher needed to confirm that her research could be done in the target area. As a very first phase, she looked for the persons who had experiences in education and understanding of the situation of the community in relation to doing the education research. Though the researcher herself is a citizen of Myanmar and had experience in the national education system, suggestions from the people were helpful to make the decisions.

Then she talked to the people to find out what were the possible ways to do the research. It was a great opportunity to meet other people from several ethnic minority groups at a literacy workshop. She was a trainer and had a chance to talk about the research and found the background information about education of the minorities in Myanmar. When the researcher was sure that she could conduct research in the villages, she made a decision to work on this study related to the minority education. She had also looked for the problems of the minority children in the context of the primary school. Based on those problems she could draw the research questions and hypothesis of the study.

### **3.1.3 Choice of research sites**

Though there are minority people living in the city, their environment is multilingual. However the researcher needed to do the research among minority children who live in a monolingual setting but who learn the curriculum in the national language which is not their own language. It was not possible to do such research in the city where national language influence is widespread. There were no suitable situations in urban areas that would have fitted the focus of the study due to the national language influence on local languages. Eventually the best fit for the research turned out to be the villages in Patheingyi Township in Ayeyarwady Division. The population of this area is predominantly Sgaw. It was also important to consider

the accessibility of the place since the researcher would have to travel alone. It was also necessary to consider whether the place could be reached easily with the help of an insider as the education research is very restricted in the country.

The researcher chose the schools by considering the schools' general backgrounds and feasibility to get test scores and make observations. She could make contact with the important persons; principals, village leaders, and the pastors and got the test scores and conducted classroom observations. It was essential to consider, apart from language, other factors that would affect educational achievement. It was necessary to think about the criteria for selecting the sites. The criteria for selecting the sites included having the same or similar background situation in terms of education, poverty, accessibility, socioeconomic level, geography, and contact with the national language. So the researcher decided to go to the east part of Pathein Township. Since she chose the villages under Pathein-Myaungmya Association, PMA<sup>2</sup> she got the villages which have the same general background in terms of religion, culture, and language whereas other factors like demographics, and socioeconomics, are slightly different. The educational situation in the villages differed in some part regarding to the proportion of the use of the mother tongue versus national language in the classroom.

In order to choose the sites the researcher first of all, asked for some suggestions about education research from the people from the education fields. She was asking about the possible language group and the location. Though there are many minority groups all over the country about whom there is no research on the education, she needed to find appropriate and accessible sites to be the focus of this research project. As the researcher herself is Sgaw Karen, she decided to choose the Sgaw people who live in Pathein.

A person who had much experience in Christian education helped her find the research sites and gave the suggestion to go Pathein where the Sgaw people live and the Karen Christian churches are advanced in doing education programs. When the researcher arrived in each of the village sites, first of all, she talked with all the pastors, village leaders, and school principal about her research and got their permission to conduct initial interviews with the school principal and the classroom teachers. Afterwards she went to the classroom to observe. She briefed them on the purpose of the study and the procedures, and found out the concerns they had

---

<sup>2</sup> PMA is part of Karen Baptist Convention (KBC) which runs the schools through its education department.

regarding the research. The researcher obtained the permission of the principal in both classes to observe the teaching in the classrooms.

### **3.2 Field Work**

This study heavily relies on analyzing the data collected from the field work. There were three trips. The first one was to collect the test scores in February 2010. The researcher went to the villages which have Early Childhood Care and Development, ECCD classes and primary schools. Then she got the test scores of Grades 1, 3 and 5 tested in November 2009 from 16 villages.

In August 2010, the second trip was made. It was the main survey conducted for finding the data that would support the statistical analysis of test scores and show evidence of the effects of language on teaching and learning. The researcher collected the background information of the learners and the teachers in Grade 3 in November 2009 especially regarding the language use. In addition, she conducted the classroom observations in two classrooms: one taught by a Burmese-speaking teacher and one by a Sgaw-speaking teacher. On the second trip, the researcher focused more on the use of the learners' mother tongue and national language in the classrooms based on what she had collected from the previous survey. The researcher checked the test scores collected from the first trip and found out that she got the test scores of Grade 3 from the first 16 villages. Then she also came to know from the first survey, that in most villages Grades 1 and 2 are taught with at least some use of Sgaw as language of instruction. She also found out the language (Sgaw or Burmese) of the teachers who taught the present Grade 3 learners when they were in Grades 1 and 2. She asked for help from the Christian Education (CE) director to find out which teachers were teaching the Grade 3 classes from which she obtained the test scores. The classroom observations were carried out on the second trip. To be able to make the comparison between the groups of learners taught by Burmese-speaking and Sgaw-speaking teachers she made a decision to choose Grade 3. Then she decided to choose at least two Grade 3 classes: one taught by a Burmese-speaking teacher and the other taught by a Sgaw-speaking teacher. She also had to consider whether the school allows her to do the classroom observation.

The third trip was the last trip, in May 2011, to the research location and the focus this time was to confirm some unclear information collected previously and to seek clarification to some questions raised during the data analysis. The three main

questions that the researcher confirmed were: language use in the Grades 1 and 2; question types on the exams from the villages; and the reasons for any exceptionally low scores. More details about the test: the setting and marking of test, samples of the exam sheets, and the test scores from three more villages were also collected. She tried to provide as many details as possible in her field notes. In addition, she also made analytical and explanatory comments in the field notes which recorded the initial interpretations and insights of the data.

### **3.3 Data Collection Techniques**

The information for this study was collected through the following three techniques: informal interviews of the teachers, pastors, village leaders, and education workers for the villages; collecting the learners' test scores from 19 villages; and making observations in two classrooms.

#### **3.3.1 Interviews**

The researcher conducted informal interviews with a Christian education director, pastors, villagers, trainers from a local non-government organization, principals, teachers, and parents. The information was collected in face-to-face interviews. She spoke Sgaw with the subjects because it helped them feel more relaxed and comfortable. The answers to the questions shown in the appendix were used as the main variables in the qualitative analysis section of the study. She collected the background information mainly from the village heads, pastors, and Christian education workers. She gathered the information about teaching and learning in the classes and the learners from the teachers as mentioned below. Additional informal observations to support the information gathered from the subjects were carried out in the village while the researcher lived in the villages. Many of these stakeholders could give the detailed information regarding their experiences and beliefs about language in education.

Initially the researcher prepared questionnaires for the teachers and principals but they were not comfortable with the interview sheet because the researcher was a stranger there. So she made friends with them and talked with them and asked about the situation of teaching and learning in the classroom, especially about using the national language or mother tongue as language of instruction. In this way she collected the information of village background and teaching and learning experiences of the teachers and the learners.

When she wrote down the facts that she had heard during the conversation she needed to look for the facts that she still needed to find out and note down. Then later she asked those questions when she chatted with the informants again. Sometimes she could not write down the information during the conversation because they did not feel secure or were not comfortable with her writing down what they say and they could not concentrate on the conversation. However those who were more familiar with her or were the same age as her did not have a problem with that; she could write down the facts and she asked the questions until she was clear about the facts on the spot. There were benefits to living in the village for a week and taking time with the villagers. The more she stayed in the villages the more she made friends with the villagers and did the observations of the real situation regarding the village background, school, children's education, languages, education and language, how the children learn, and the contact with other Burmese villages.

When she talked with the teachers and principal, first she introduced herself. Then she explained about the research to the informants. When she talked a little bit about her research, some of them started to ask some questions and they went on with the conversation lead by her. Or she began the dialogue with some questions such as the following:

- Could you please tell me what your experiences in teaching are?
- What problems do you find when you teach the class?
- How did you manage using the languages, Burmese and Sgaw, to teach the subjects?
- When you teach in Burmese what are the children's responses?

During the conversation, some questions came up for further information and she asked them. They also added more information as much as they knew since the relationship was built up during the talk. With informants who felt closer to her, because for instance their age was the same as hers or they seemed to be perfectly willing to help her, she could ask openly any questions.

### **3.3.2 Test scores**

In the first trip to the research sites the researcher could gather the test results from 16 villages. Before she visited the villages to collect the test scores, the CE director had contacted the village pastors and informed them that a researcher would come to collect the test scores. The pastor, who is like the head of the village, informed

the principal and made a request to collect the test scores for her in advance. When she reached the villages she stopped at the pastor's house and went to meet the principal at the school and made a request for the test scores to use in the study explaining about the research. In some villages, the pastors invited the principals to meet with the researcher, talk about the research, request the test scores, and have lunch together. After that she and her friend who accompanied her copied the test scores into the note books. She could do it quickly with the help of her friend and could save the time for travelling to the next village. She was trying to collect the learners' test scores village by village. She could collect 2-4 villages per day. If the villages are far from each other she could collect only 2 villages in a day. She had to travel by motorcycle or boat. She could hire the cycle which was driven by the education field workers from PMA. Sometimes the villagers helped her to travel from village to village by boat. When the researcher and her friend entered the village they were very unfamiliar to them and noticed by all the villagers. However fortunately she managed to collect data in 16 villages: 9 Sgaw-speaking teachers' classes and 7 Burmese-speaking teachers' classes in the first trip and 3 villages: two Sgaw-speaking teachers' classes and 1 Burmese-speaking teacher's class in the third trip. All together the researcher collected the test scores from 19 villages and used them in the study. She could collect the test scores from the learners who were in Grade 3 in November 2009.

### **3.3.3 Classroom observations**

The two observed classes were in two schools among the 19 schools analyzed in Chapter 5. Grade 3 was chosen to be observed. It is feasible to find the differences between two different types of classes in respect to the use of language of instruction in Grade 3 classes rather than in Grades 1, 2, 4, and 5. In almost all of the schools in Sgaw villages, Sgaw-speaking teachers are necessarily assigned to teach in Grades 1 and 2 since the learners are not familiar with Burmese. The classroom observations were carried out in class 1 in village B01 and class 2 in village B02. Class 1 was taught by a Burmese-speaking teacher and class 2 is taught by a Sgaw-speaking teacher. The researcher believes that the observed classes were representative of primary education because they were similar to her experience as someone who went through the Myanmar education system.

Before the class the researcher met the teacher and asked for the teaching schedule and what the researcher was going to teach for each subject so that the researcher could understand the lesson plan and note down the facts. When she did the

observation, to be able to know what the teaching techniques are and whether the children are learning the lessons effectively, she observed the class the whole day for 8 days in each class. To get the information of language use by both teachers and learners, the researcher tried to observe:

- How do the learners and the teacher interact;
- How do the learners and the teacher communicate;
- How does the teacher give instructions;
- How do the learners respond;
- How does the teacher correct the learners;
- How does the teacher explain the lessons to the learners;
- How do the teacher and the children solve the problems;
- How do the learners learn the lessons;
- What is the classroom arrangement;
- What do the materials for Burmese, English, Mathematics, and General Science look like;
- What languages are used by the teachers and the learners? How are they used?

If the researcher needed clarifications, she approached the participants after class. She managed to be not much noticed by the participants. While observing, she sat at the back of the classroom and noted down what was happening in the class. If she needed clarifications, she approached the teacher during a short interval between the subject sessions or lunch break. She also took a chance to take a video recording from the third day after asking the teacher permission. During the observation process, she carefully watched, listened, and wrote down the facts, in order to get a detailed picture of the interaction between the teacher and the learners.

### **3.4 Data Analysis**

For the purpose of the research, this study uses both qualitative and quantitative analysis. Quantitative analysis was carried out to examine tests scores of Grade 3 learners from two different types of groups one taught by a Burmese-speaking teacher and the other taught by a Sgaw-speaking teacher. Various statistical models were fitted to the data seeking the model which best explains the data in terms of factors that influence test scores, including teacher language, gender, class, class

size. Qualitative analysis is carried out by manually coding, categorizing the interviews and observational notes. By conducting both of those analyses, the investigation into the data is enhanced to provide the reliable answers to the research questions of the study. The impact of language use in classroom not only on the learners' academic achievement but also on the learners' experience of learning in classroom is measured.

### **3.5 Limitations**

The researcher could not manage to obtain all the background information of the schools to decide where she should go. The time was very limited to find the villages that would meet the needs for the analysis. Besides, it was not a good time for the researcher to go into the villages and conduct the classroom observations because it was near to the time of parliamentary elections. The researcher was very limited in selecting the research sites because she had to not only find villages with similar background situations so that the background variables are not the factors that would affect the teaching and learning rather than the factor of language use, but also think about having a good relationship among the village leaders, pastors, principal and teachers.