

**A PRELIMINARY ANALYSIS OF  
THE INDONESIAN SENIOR HIGH SCHOOL STUDENTS' ERRORS  
IN LEARNING  
NOMINAL DEPENDENT WH - INTERROGATIVE CLAUSES**



*Wahyana Antonius*  
I. 1740

**The Department of English Language  
and Literature  
Faculty of Arts and Letters  
Sanata Dharma  
Teachers' Training Institute  
YOGYAKARTA, 1985**

**A PRELIMINARY ANALYSIS OF  
THE INDONESIAN SENIOR HIGH SCHOOL STUDENTS' ERRORS  
IN LEARNING  
NOMINAL DEPENDENT WH - INTERROGATIVE CLAUSES**

**A Thesis  
Presented to  
The Department of English Language  
and Literature  
Faculty of Arts and Letters  
Sanata Dharma  
Teachers' Training Institute**

**A Partial Fulfilment  
of the Requirements for the  
Sarjana Degree**

**by :**

***Wahyana Antonius***

**I. 1740**

**Yogyakarta, April 1985**

"Ask, and it shall be given you;  
seek, and ye shall find; knock,  
and it shall be opened you."  
(ST. MATTHEW 7:7).

#### ACKNOWLEDGEMENT

I gratefully acknowledge the help and advice of a number of lectures<sup>r</sup>, English teachers of Senior High Schools, and friends in the preparation on this thesis. Dra. M.I. Indriani Arief, my supervisor, in particular deserves my first thanks for giving me the benefit of her long and varied experience in English language teaching in cogent and detailed comments on the thesis in manuscript. A similar vote of thanks goes to Dr. Soepomo Poedjosoedarmo, my sponsor, who in spite of his duty as the Head of the English Department of IKIP Sanata Dharma, has been ready to sacrifice his precious time to go through the final draft of this thesis. It was also his generosity in lending some books that helped me compose this thesis.

I was also greatly indebted to all my lectures<sup>r</sup> who have set on me the basic ability to finish my study at the English Department. My unforgettable thanks also go to all of my friends, to an exceptional degree Harto Pramono, Andre Karo Karo, and Nirmalasari. These three

friends have psychologically and physically supported me to finish this thesis as soon as possible. They also became good readers in the manuscript and made valuable comments on it.

I should also thank the principal and English teachers of SMA 3 Yogyakarta who have helped me in trying out the test. My appreciation also goes to the principals and English teachers of the fourteen selected high schools for the permission to conduct the research in their schools.

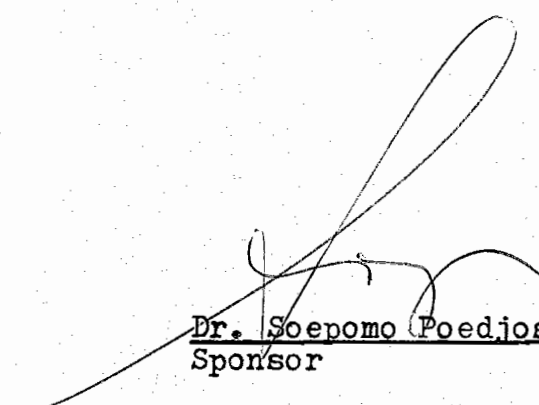
My last but not least thanks go to my beloved father and mother, brothers and sisters, and all relatives who have facilitated and encouraged me to finish my study in this college.

WAHYANA ANTONIUS

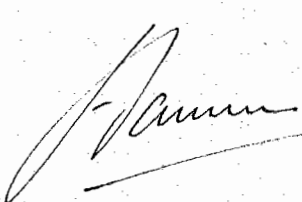
APPROVED BY:



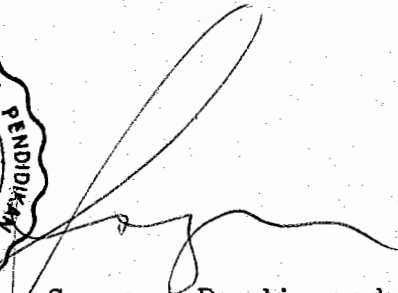
Dra. M.I. Indriani Arief  
Supervisor



Dr. Soepomo Poedjosoedarmo  
Sponsor



Drs. F. Danuwinata, S.J.  
Rector of IKIP  
Sanata Dharma



Dr. Soepomo Poedjosoedarmo  
Head of the English Dept .  
IKIP Sanata Dharma

## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENT .....	i
OFFICIAL APPROVAL PAGE .....	iii
TABLE OF CONTENTS .....	iv
CHAPTER I : INTRODUCTION .....	1
CHAPTER II : AN OVERVIEW OF RELATED LITERATURES ..	6
2.1. THE GRAMMAR OF NOMINAL	
DEPENDENT WH- INTERROGATIVE	
CLAUSES .....	6
2.1.1. That Clauses .....	10
2.1.2. Dependent Wh- Interrogative	
Clauses .....	10
2.1.3. Nominal Relative	
Clauses .....	11
2.1.4. To-Infinitive Nominal	
Clauses .....	11
2.1.5. Nominal -ing Clauses ....	12
2.2. THE DEPENDENT WH- INTERROGATIVE	
CLAUSES OFFICIALLY STATED IN	
THE CURRICULUM OF SMA 1975 .....	13
2.3. ERROR ANALYSIS .....	15
CHAPTER III : METHODOLOGY .....	20
3.1. THE METHODS .....	20
3.2. THE POPULATION AND SAMPLES .....	21
3.3. THE CONSTRUCTING OF THE TEST ...	27



3.3.1. The Planning of the Test ....	28
3.3.2. The Trying out of the Test ..	30
3.3.3. The Analysing of the Results of the Test Try-out .....	30
3.3.3.1. The Suitability of the Test For the Respondents ....	31
3.3.3.2. Reliability and Validity .....	31
CHAPTER IV : TREATMENT OF THE DATA AND INTERPRE-	
TATION OF FINDINGS .....	37
4.1. THE FIRST RAW DATA OF THE TEST ...	38
4.2. THE ANALYSIS OF THE DATA .....	45
4.3. REJECTION OR CONFIRMATION FOR THE FIRST HYPOTHESIS .....	49
4.4. THE SECOND RAW DATA OF THE TEST ..	50
4.5. THE ANALYSIS OF THE SECOND DATA ..	56
4.5.1. Inversion Errors .....	57
4.5.2. Redundancy Errors .....	61
4.5.3. Errors in terms of Mis- placement of To Be .....	63
4.5.4. Errors in terms of Omission of To Be .....	65
4.5.5. Agreement Errors .....	67
4.5.6. Errors in terms of Omission of To Do .....	71
4.5.7. Beverb Errors .....	73

4.6. REJECTION OR CONFIRMATION FOR THE SECOND HYPOTHESIS .....	75
CHAPTER V : SUGGESTED STRATEGIES TO ELIMINATE THE ERRORS .....	77
5.1. HOW TO PREVENT ERRORS .....	77
5.2. CONVERSATIONAL EXERCISES .....	81
5.2.1. Three Models of Conversa- tional Exercises .....	84
CHAPTER VI : CONCLUSION .....	93
BIBLIOGRAPHY : .....	96
APPENDICES : .....	99
APPENDIX I : The Test .....	100
APPENDIX II : The Distribution of Highs, Averages, and Lows .....	106
APPENDIX III : The Tabulation of the Scores of the Test Try-out .....	121
APPENDIX IV : The Split-Half Method of Computing the Reliability of the Try-out .....	123
APPENDIX V : The Computation of the Validity of the Test Try-out Using the Pearson's Product Moment Correlation Formula .....	127
APPENDIX VI : The Overall Findings of the Second Data .....	130



## CHAPTER I

### INTRODUCTION

#### 1.1. THE BACKGROUND OF THIS STUDY

Before he describes the background of his study, the writer wants to point out what is actually meant by nominal dependent wh- interrogative clauses. This grammatical term is firstly introduced by Randolph Quirk and his fellow writers: Sidney Greenbaum, Geoffry Leech, and Jan Svartvik. The same grammatical item is termed differently either by Robert Lado or Robert Krohn. The former terms that grammatical item as "included sentences with who, when, what, etc.", while the latter terms it as "embedded wh- clauses". Why the writer prefers to apply the term suggested by Randolph Quirk and his fellow writers lies on the ground of clarity the term offers. In his opinion, the term given is more clarified and can be more easily understood by the readers. (Detailed descriptions can be read through chapter IV).

The element of English grammar mentioned above

is actually one out of the teaching items stated in the English Curriculum of SMA. This teaching item has been officially stated since the curriculum was first introduced to be implemented. If we observe the 'GBPP'<sup>1</sup> this teaching item/material can be easily found out under phase: 1.2.1. "Kalimat Langsung/Tak Langsung" ( Direct and Indirect Speech) and phase 1.17.1. "Fungsi - fungsi klausa" (Functions of clauses). However, the main concerns of this study are actually those which are put under the phase 1.2.1.3. "He wanted to know where I came from (why, when, who, how, etc.) and phase 1.17.1.1. Noun Clauses (but only those which are introduced by the wh- elements listed in phase 1.2.1.3.).

There are some reasons why the writer decides to lift this area of grammar to be the main project to discuss in his thesis.

- (1) The test collecting data constructed indicates that students of SMA-s do experience difficulties in learning dependent wh- interrogative clauses. (Observe the students' sentence productions in writing.)
- (2) Teachers of English as a foreign language in Indonesia do not seem to consider that students of SMA-s still experience difficulties in learning nominal dependent wh- interrogative clauses.

---

<sup>1</sup>Departemen P & K, GBPP - Buku IID2 (Jakarta : PN Balai Pustaka, 1981), p. 16 & p. 24.

- (3) There have never been discussions or articles concerning the students' linguistic problems in this area, if any, they are not detailed. In other words, this field of grammar has never been investigated by any other researchers.

## 1.2. THE PURPOSE OF THIS THESIS

This study is interested in finding out whether the learning of "nominal dependent wh- interrogative clauses" has been a burden to students of SMA-s (Senior High Schools) in learning English or not. If it is a burden, what may cause such a burden then? This investigation can be traced through the errors that the students make in their sentence productions both orally and in writing. If the students of SMA-s really experience difficulties in learning the nominal dependent wh- interrogative clauses, then not only is this study interested in finding out types of errors, but it is interested in tracing what possibly cause such errors as well.

For the purposes of this study, two hypotheses are then formulated.

- (1) It is hypothesized that students of SMA-s do experience difficulties in learning the dependent wh- interrogative clauses officially stated in the curriculum of SMA 1975. The difficulties lead the students to errors. The errors are possibly caused by either interlingual inter-

ference, intralingual interference, or the students' carelessness or negligence.

- (2) It is also hypothesized that students of SMA-s commit various types of errors in learning the dependent wh- interrogative clauses, and inversion errors are hypothesized to be the most common and striking errors committed. The languages the students have mastered -Javanese and Indonesian- and the previously acquired components within the target language itself make the students commit the errors.

To conduct this study satisfactorily, many things should be well taken into account. That is why, methods applied, population and samples of the study, a collecting data employed are deeply discussed in chapter IV.

### 1.3. ORGANIZATION OF THIS THESIS

To make the discussion easy to follow, the contents of this thesis are systematically arranged or organized.

Prior to coming to the essence of this thesis, the writer would like, in the first place (chapter II) to present an overview of related literatures. This chapter will discuss the grammar of dependent wh- interrogative clauses in a large scope and those which are officially stated in the curriculum of SMA 1975. This chapter will also present a theoretical framework of the error analy-

sis which, hopefully, can be employed to reveal the sources of errors encountered in the writer's study.

The following chapter, chapter III, will particularly examine the methods of research employed in the study. The population and how to obtain respondents will be covered in this chapter, too. This chapter also verifies how the test collecting data is constructed, tried out, and analysed to see its suitability, reliability and validity.

Chapter IV is the core of this thesis. It provides detailed analysis of the data compiled. In this chapter the readers will be able to observe the findings obtained during the study. The precision of the writer's hypotheses will be examined as well.

Chapter V offers some relevant ideas or suggestions on how to eliminate or at least to minimize the errors much of the time committed by the students. Some types of drills are, therefore, illustrated in this chapter.

The final chapter, chapter VI, gives us a chance to reflect on the main points previously spelt out in some detail in the earlier chapters. To end this chapter the writer invites researchers to conduct further studies on the same topic with the hope that more complete, accurate, and perfect findings can be obtained.

----- 00000 -----

## CHAPTER II

### AN OVERVIEW OF RELATED LITERATURES

This chapter is devoted particularly to giving an overview of related literatures related to the study that the writer conducts. Some theories which discuss the grammar of Nominal Dependent Wh- Interrogative Clauses, the Nominal Dependent Wh- Interrogative Clauses officially stated in the SMA Curriculum 1975, and error analysis will be spelt out here to some extent.

#### 2.1. THE GRAMMAR OF NOMINAL DEPENDENT WH- CLAUSES

Hitherto, there has not been a commitment in naming the pattern which will be the main concern of this thesis. Grammarians have given it different grammatical terms.

Let us now observe the following grammatical terms which actually refer to one grammatical framework.

Robert Lado and Charles C. Fries<sup>2</sup> call this pattern of grammar as included sentences with 'who', 'when', 'what', etc.. They also confirm that the pattern can occur either in object position or subject position. The following examples will clarify the statement given above.

- (1) I know who teaches the class.
- (2) He knows when he teaches the class.
- (3) What happened caused a big discussion.
- (4) What he said was not easy to understand.

The included sentences introduced by who and when in the first two occupy the position of object of the complex sentence, while the second two included sentences occupy the position of subject of the complex sentence.

Robert Krohn<sup>3</sup> names the components as embedded wh- clauses. He also comes up with a conclusion which is much the same as what has been pointed out by Robert Lado and Charles C. Fries that such clauses can either be placed in the object position or in the subject position of the complex sentence.

---

<sup>2</sup>Robert Lado and Charles C. Fries, English Sentence Pattern, Fifth Ed. (Michigan: Ann Arbor - The University of Michigan Press, 1960), p.p. 156 - 162.

<sup>3</sup>Robert Krohn, English Sentence Structure, Tenth Ed. (Michigan: Ann Arbor - The University of Michigan Press, 1977), p.p. 172 - 177.

Randolph Quirk and his fellow writers: Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik<sup>4</sup>, give a longer term for the currently discussed component, namely: nominal dependent wh- interrogative clause. In this thesis, the writer prefers to apply the latter term suggested by Randolph Quirk. The reason of his choice lies on the ground of clarity the term offers. In his opinion, the term given is more clarified and hopefully the readers can really understand what the component is actually.

By the term 'nominal dependent wh- interrogative clauses' Randolph Quirk means that the clauses are nominal and they are neither adjectival nor adverbial. He indicated that the former clause has a function approximating to that of a noun phrase<sup>5</sup>. This clause is dependent. Since it is dependent, by all means, it cannot stand alone as a sentence but is a part of the sentence in which it occurs and performs one function in the sentence<sup>6</sup>. As regards to meaning, these clauses resemble wh-questions in that they leave a gap of unknown information

---

<sup>4</sup>Randolph Quirk et al., A grammar of Contemporary English, Ninth Ed. (London: Longman Group Ltd., 1980), p. 735.

<sup>5</sup>Ibid. p. 732.

<sup>6</sup>Department of Education and Culture, Structure Reference II & III (Bandung: Star Offset, 1972), p. 32.



which is represented by the wh- element<sup>7</sup>. That is why , the phrase wh- interrogative is used here to complete the term.

For the purpose of giving the readers general knowledge about the types of nominal clauses, what they can function as in the complex sentence, let us examine in brief each of the following major categories of those clauses.

According to Randolph Quirk, nominal clauses (or clauses equivalent in function to noun phrases) fall into five major categories<sup>8</sup>. They are as follows:

- 2.1.1. The 'that' clause, or dependent declarative clause,
- 2.1.2. The dependent wh- interrogative clause,
- 2.1.3. The nominal relative clause,
- 2.1.4. The to-infinitive clause, and
- 2.1.5. The 'ing' clause.

Let us now observe these clauses one by one. The examples provided are all taken from A Grammar of Contemporary English<sup>9</sup>.

---

<sup>7</sup>Randolph Quirk and Sidney Greenbaum, A University Grammar of English (Hongkong: Longman Group Ltd., 1981), p. 318.

<sup>8</sup>Quirk et al., op. cit. p. 734.

<sup>9</sup>Quirk and Greenbaum, op. cit., p.p. 316 - 321.

### 2.1.1. "That Clauses"

The 'that clause' can occur as:

- subject : That she is still alive is a consolation.
- direct object : I told him that he was wrong.  
I knew that he was wrong.
- subject comple- : The assumption is that things will im-  
ment prove.
- appositive : The assumption, that things will im-  
prove, is unfounded.
- adjectival : I'm not sure that things will improve.  
complement

### 2.1.2. "Dependent Wh- Interrogative Clauses"

Since these clauses are introduced by wh- elements, they are called "dependent wh- interrogative clauses". The dependent wh- interrogative clause can occur in the whole range of functions available to the that-clause, and in addition can act as prepositional complement.

- subject : How the book will sell depends on its author.
- direct object : I can't imagine what made him do it.
- subject comple- : The problem is not who will go but  
ment who will stay.
- appositive : My original question, why he did it  
at all, has not been answered.

adjectival : I wasn't certain whose house I was in.  
 complement  
 prepositional : No one was consulted on who should  
 complement have the prize.

### 2.1.3. "Nominal Relative Clauses"

The nominal relative clauses which are introduced by wh- elements can act as:

subject : What he is looking for is a wife.  
 direct object : I want to see whoever deals with complaints.  
 indirect object : He gave whoever came to the door a winning smile.  
 subject complement : Home is where your friends and family are.  
 object complement: You can call me what(ever) you like.  
 appositive : Let us know your address (that is, where you live in term time).  
 prepositional : You should vote for which(ever)  
 complement candidate you think best.

### 2.1.4. "To-Infinitive Nominal Clauses"

The 'to-infinitive nominal clause' can occur as:

subject : To cook takes a lot of time.  
 direct object : He wants me to leave soon.  
 subject complement : To be a member of the Space Club is to be one of the most privileged citizens in the world.

- appositive : His ambition, to be a straight actor ,  
was never fulfilled.
- adjectival : I'm glad to help you.
- complement

#### 2.1.5. "Nominal -ing Clauses"

The 'nominal -ing clauses', which may be called, following traditional terminology, a participial clause occurs in the following positions:

- subject : Eating people is wrong.
- direct object : Noone enjoys deceiving his own family.
- appositive : His one claim to fame, being secretary of the local tennis club, is the current theme of his conversation.
- subject complement : His favourite pastime is playing practical jokes.
- prepositional : I'm tired of being treated like a child.
- adjectival : The children were busy building sandcastles.

Observing each category of the types of nominal clauses, it is clear now that nominal clauses have equivalent functions to noun phrases. Each category has more or less the same functions. Noun phrases can occur in the whole range of functions in the sentence, and, of course, so can the nominal clauses. Although those five major categories of noun clauses have a great deal in common in

terms of functions, still they cannot be taught altogether at the same time. Each category has its own form, and if they are taught altogether at the same time, it will lead most of the students into confusion. Besides, the nominal dependent wh-interrogative clause itself is a large teaching item. It will be very wise and helpful for the students if they are learnt separately one at a time.

Nevertheless, in this thesis the writer has no intention of **discussing all of those categories**. He only selects one out of the five major categories which very often confuses the Senior High School students especially and the Indonesian learners learning English in general, and that is: the nominal dependent wh- interrogative clause. The students' errors in learning this English element will be spelt out in detail in chapter VI and some suggestions on how to prevent the students from the defined errors will be offered throughout chapter V. The suggestions are made based on the writer's teaching experience.

## 2.2. THE DEPENDENT WH- INTERROGATIVE CLAUSES OFFICIALLY STATED IN THE CURRICULUM OF SMA 1975

Before we proceed further, let us now observe the teaching items dealing with the element of English grammar being discussed which are officially included in in the curriculum of Senior High School 1975.

Teachers of English throughout Indonesia are

supposed to know that the nominal dependent wh- interrogative clause is a part of the English elements and should be taught systematically. This statement is enlightened here in accordance with the SMA English curriculum 1975. The dependent wh- interrogative clauses are still broken down into several subtopics. And the topics or subtopics can be observed under the following codes: 1.2.1. "Kalimat Langsung/ Tak Langsung" (Direct and Indirect Speech), especially those which are included under phase 1.2.1.3.<sup>10</sup> and 1.17.1. "Fungsi-fungsi Klausa" (Functions of Clauses)<sup>11</sup>, especially those which are included under the phase 1.17.1.1.

Following is the teaching materials which are suggested in phase 1.2.1.3.<sup>12</sup>:

"1.2.1.3. 'Kalimat tak langsung dari kalimat langsung yang berbentuk interogatif yang memakai kata tanya (Indirect statements which are derived from direct questions introduced by wh- elements):

He wanted to know where I came from  
He asked me how to study English."

The first pattern will be discussed in this thesis and the writer has no intention of discussing the second one.

---

<sup>10</sup>Departemen P & K, op. cit. p. 50.

<sup>11</sup>Ibid. p. 47.

<sup>12</sup>Ibid. p. 50.

The next quotation will let us know the teaching materials which are suggested under phase 1.17.1.1.<sup>13</sup>:

"1.17.1.1. Noun Clauses: jenis-jenis dan pemakaianannya (Noun Clauses: types and usages):

- a. sebagai subyek ( as a subject):  
What you know is nobody's secret.
- b. sebagai complement ( as a complement):  
Here is what I want.
- c. sebagai obyek langsung (as a direct object):  
I know what you want to say.
- d. bersama obyek tak langsung (together with an indirect object):  
Tell me what you want."

As a conclusion, therefore, according to Book IID2, noun clauses can function either as a subject, a complement, or a direct object of a sentence. At this point, it can also be concluded that the functions of the noun clauses listed in Book IID2 are smaller in number than those of the number of the functions of the same element pointed out by Randolph Quirk and his fellow writers described above. In addition, these teaching materials are supposed to be given in the fifth semester, and are the teaching materials listed in phase 1.2.1.3.<sup>14</sup>.

### 2.3. ERROR ANALYSIS

This section presents a theoretical framework of the error analysis. Though the error analysis here is briefly discussed, hopefully it can be employed to reveal

---

<sup>13</sup>Ibid. p.p. 47 - 48.

<sup>14</sup>Ibid. p. 50.

possible causes or sources of the students' errors in learning the dependent wh- interrogative clauses. The writer also expects that this review by which the detailed ideas have been completely clarified by Jack C. Richards and Gloria P. Sampson<sup>15</sup> and M.P. Jain<sup>16</sup> can let the teachers of English throughout Indonesia understand the characterizing and influencing factors that may cause the learners who are acquiring a new language to commit errors.

In acquiring a new language a learner will commonly commit errors if s/he is asked to use the target language to communicate. Such errors are interesting and have been increasingly examined by researchers in their field by the so-called error analysis. By conducting error analysis, they try to analyze (to identify and to locate) the errors committed by the learners and then keep on finding out the possible causes or sources which

---

<sup>15</sup>Jack C. Richards and Gloria P. Sampson, "The Study of Learner English," Error Analysis, Ed. by Jack C. Richards (London: Longman, 1974), p.p. 3 - 8.

<sup>16</sup>M.P. Jain, "Error Analysis: Source, Cause and Significance," Error Analysis, Ed. by Jack C. Richards (London: Longman, 1974), p.p. 189 - 215.



finally facilitate them to offer better teaching strategies or techniques. Researchers who have paid much attention on that subject, among other things, are: Jack C. Richards, Gloria P. Sampson, S.P. Corder, L. Selinker, William Nemser, Heidi C. Dulay, Marina K. Burt, Roar Ravem, M.P. Jain, and some others.

According to Jack C. Richards, the proponent of error analysis, there are seven factors which may influence and characterize students' system in acquiring a new language<sup>17</sup>. Those seven characterizing and influencing factors are as follows:

- (1) language transfer,
- (2) intralingual interference which involves overgeneralization, ignorance of rule restrictions, incomplete application of rules, and false concepts hypothesized,
- (3) sociolinguistic situation,
- (4) modality,
- (5) age,
- (6) successions of approximative systems, and
- (7) universal hierarchy of difficulty.

By language transfer it is meant that the sentences or utterances in the target language produced by the learner are influenced by his or her native language(mother tongue) or languages the student has mastered. George (1971), Lance (1969), and Budhiprabha (1972)

---

<sup>17</sup> Richards and Sampson, op. cit., p.p. 5 - 15.

found that one-third of the deviant sentences from the second language learners could be attributed to language transfer<sup>18</sup>. The influence of the learners' mother tongue and the learners' previously mastered language is also termed as interlingual interference.

By intralingual interference it is meant that the deviant sentences or utterances are a result of partial exposure to the target language itself. This source of errors can still be sub-divided into four categories. If a student makes a deviant utterance on the basis of two grammatical sentences, then s/he is dealing with the so-called over-generalization; if a student applies a rule to a context where it does not apply, then s/he is dealing with the so-called ignorance of rule restrictions; if a student makes a deviant sentence or utterance after undergoing some oral drills, then s/he is dealing with the so-called incomplete application of rules; and finally if a student develops errors because of his false concept of a certain grammatical pattern, then s/he is dealing with the so-called false concepts hypothesized.

In order to reveal the possible causes/ sources of the students' errors in learning dependent wh- interrogative clauses, the writer of this thesis will only base on two factors. He assumes that the most influencing and characterizing factors causing the learners' errors are the first two factors, namely: the language

---

<sup>18</sup>Richards and Sampson, Ibid., p. 5.

transfer and intralingual interference. The two resulting errors, language transfer and interlingual errors, confirm the traditional notion of transfer of training; that is previous learning may influence later learning<sup>19</sup>. The other five factors pointed out by Jack C. Richards and Gloria P. Sampson, therefore, will not be employed here to reveal the possible causes/ sources of the students' errors in learning the topic being discussed in the study.

----- 00000 -----

---

<sup>19</sup>Ibid., p. 6.

## CHAPTER III

### METHODOLOGY

Many things should be taken into account if some one is to conduct a good research. Among them are methods applied, population and samples of the study, and a test collecting data employed. A test collecting data is considered well constructed if it is reliable and valid. These three main points will be spelt out in some detail in this chapter.

#### 3.1. THE METHODS

The methods employed in this study are of two kinds, i.e. statistical method and descriptive method. The latter is commonly identified as analytic method<sup>20</sup>. The former method is employed here to confirm the reliability and validity of the test constructed, while the

---

<sup>20</sup> Winarno Surachmad, Dasar dan Teknik Research (Bandung: C.V. Transito, 1970), p. 132.

latter is employed here to describe the problems the students of SMA are facing. In terms of descriptive method, Winarno Surachmad<sup>21</sup> states that the method at least contains two characteristics, namely: (1) it focuses on solving the problems which exist, and (2) the findings are arranged in such a way, interpreted, and then analysed. That is the reason why this method is often termed analytic method. To conclude, therefore, we can say that descriptive method is not limited on the collection or arrangement of data only but it is more than that. It involves analysis and interpretation of the data compiled.

Before we really apply those method, let us now discuss the population and samples of the study to a certain degree.

### 3.2. THE POPULATION AND THE SAMPLES OF THE STUDY

Since the population of the study is large -Senior High School students: especially those whose domiciles are in the Special District of Yogyakarta - the writer, then decides to conduct his research by reducing the number of the population. Although he only conducts his research on some SMA students, in a more formal term they are called samples, at the end of this research he expects that he can generalize the findings

---

<sup>21</sup>Ibid.

to the population mentioned above. To enable such a study, the writer employs the so-called sampling study or research sampling.

By research sampling Sutrisno Hadi<sup>22</sup> means that the study does not observe or investigate all subjects, situations, or events. It only observes or investigates a part of subjects, situations, or events concerned.

Realizing that Special District of Yogyakarta consists of five regencies, i.e.: Kotamadya Yogyakarta, the regency of Bantul, the regency of Kulon Progo, the regency of Wonosari, and the regency of Sleman, the writer also decides to take the samples from those five different regencies. Each regency should have its own samples which are expected to be representative. The number of the samples will be figured out in detail later.

In terms of status, Senior High Schools in the Special District of Yogyakarta are classified into four different status, namely: public, subsidiary, *berbantuan*\*, and private senior high schools. All of these schools are permitted by the government, under the control of the Department of Education and Culture, to assist the Indonesian youngsters to gain formal education. Kotamadya Yogyakarta and the regency of Sleman have those four types of senior high schools,

---

<sup>22</sup>Sutrisno Hadi, Metodologi Research 1 (Yogyakarta: Universitas Gajah Mada, 1978), p.70.

whereas the regency of Bantul, Kulon Progo and Wonosari do not. These three regencies only manage two types of senior high schools: public and private. The two factors, status and regency, influence the writer in obtaining better samples.

The writer also realizes that region and status are not the only criteria to formulate good samples. The strata of the population should be well considered too. It is widely acknowledged that the strata of the students in each class are heterogeneous in terms of their achievement. There are high, average, and low students. The proportion of the samples must be in accordance with those strata. If we decide to take ten percent as respondents from high achievers for example, we should, therefore, be consequent to take the same percentage both from average and low achievers. This consideration, finally, makes the writer employ the so-called proportional stratified random sampling<sup>23</sup>.

There are two procedures that can be implemented when a researcher wants to employ random sampling<sup>24</sup>:

- (1) lottery procedure, and
- (2) ordinal procedure.

In order to obtain the samples needed, the writer pre-

---

<sup>23</sup> Ibid., p. 82.

<sup>24</sup> Ibid., p. 76.

fers the second procedure, that is ordinal procedure. Theoretically, therefore, this procedure can be done by selecting the schools which either have odd numbers, even numbers, multiple three, five, ten, etc. In this study the writer wants to select the senior high schools which are listed or written first in each category or status within five different regencies.

Based on the booklet issued by the District Office of Department of Education and Culture (Special District of Yogyakarta), the writer can select the following senior high schools:<sup>25</sup>

TABLE I  
SENIOR HIGH SCHOOLS SELECTED BY  
ORDINAL PROCEDURE

NO:	NAMES OF SCHOOLS	STATUS	DISTRICT
1. 2. 3. 4.	SMA 1 SMA Stella Duce SMA Nusantara SMA Ma'arif	Public Subsidiary Berbantuan* Private	Kotamadya Yogyakarta
5. 6.	SMA 1 SMA Bopkri	Public Private	Regency of Bantul
7. 8.	SMA Wates SMA Bopkri	Public Private	Regency of Kulon Progo
9. 10.	SMA 1 SMA Muhamadiyah	Public Private	Regency of Wonosari
11. 12. 13. 14.	SMA 1 SMA De Britto SMA St. Thomas SMA St. Agustinus	Public Subsidiary Berbantuan* Private	Regency of Sleman

<sup>25</sup> Kanwil Departemen P&K D.I.Y., Daftar Sekolah Sekolah di Lingkungan Kanwil P&K D.I.Y., p.p. 3 - 22.



Since there has not been a commitment on the percentage of the samples that should be taken from the population, the writer decides to select respectively 25% students from each stratum to become samples. The maximum number of students in each class, according to the Department of Education and Culture<sup>26</sup>, is forty four. While the writer's observation on the students' scores on the English subject indicates that the distribution of highs, averages, and lows is 7-28-9. At times, the distribution varies a little bit, such as: 6-31-7, 5-30-9, 7-30-7, however, these do not make any necessary differences. Most classes that are employed have a 7-28-9-distribution<sup>27</sup>. The number of respondents from each class can be figured out as follows:

TABLE II  
THE NUMBER OF RESPONDENTS  
FROM EACH SELECTED CLASS



NO:	STRATA	NUMBER OF STUDENTS	PERCENTAGE	PURE RESULT - ING RES- PONDENTS	ROUNDING RESULT - ING RES- PONDENTS
1.	Highs	7	25%	1.75	2.0
2.	Averages	28	25%	7.0	7.0
3.	Lows	9	25%	2.75	3.0
TOTAL OF ROUNDING RESULTING RESPONDENTS=					= 12

<sup>26</sup>Eddy Soegito, the Director of SMA 4 interview August 20, 1984.

<sup>27</sup>The complete data are presented in appendix II.

By the figure indicated above, the total number of respondents from each selected class is 12 (see table II), now we can count the total respondents from the fourteen selected senior high schools. The calculation is as follows:

$$14 \times 12 = 168 \text{ respondents}^{28}.$$

These 168 respondents are of the third year students of senior high school. Some of them belong to the Physical Department and some others belong to the Social Department. The writer did not take any respondents from the Language Department. The reason is because the number of the students who belong to that department is very small, and what is more, there are only two senior high schools, throughout the Special District of Yogyakarta, which still run the latter program (SMA De Britto and SMA Stella Duce). The lottery procedure is employed here to decide whether the writer takes the Physical Department students or the Social Department ones.

---

<sup>28</sup>14 refers to the number of selected senior high schools based on ordinal random sampling procedure; whereas 12 refers to the numbers of respondents which are taken from each class by using proportional stratified random sampling.

### 3.3. THE CONSTRUCTING OF THE TEST

As we know, there are many kinds of tests. J.B. Heaton<sup>29</sup> pointed out four different tests, i.e. achievement/attainment test, proficiency test, aptitude test, and diagnostic test. Each of this is distinguished from another by its purpose. The test used in this study is of the latter type, that is diagnostic test. This test is administered not to know the students' achievement exclusively but to diagnose the areas of difficulty the students are experiencing. The inputs(data) can, therefore, be used by the classroom teacher to provide remedial teaching<sup>30</sup>. This test is convenient to diagnose the grammatical errors committed by the pupils learning a foreign language, in this case, English.

In line with the recommendation given by J.B. Heaton, the writer decides to employ the diagnostic test to collect the necessary data. The constructing of the test involves:

- 3.3.1. planning the test,
- 3.3.2. trying out the test, and
- 3.3.3. analysing the results of the try-out.

The latter is verified to see whether the going-to-be used test is valid and reliable or not.

---

<sup>29</sup>J.B. Heaton, Writing English Test (London: Longman Group Ltd., 1975), p.p. 162 - 165.

<sup>30</sup>Ibid., p. 165.

### 3.3.1. The Planning of the Test

The preparation of the test is made in correspondence with the function and place of the dependent wh- interrogative clauses or of the embedded questions pointed out by Steven J. Molinsky<sup>31</sup>. It is a fact that a dependent wh- interrogative clause can function either as a subject, an object, a complement, an appositive, or a prepositional complement. The test to collect the data, therefore, should ideally cover all of those functions. However, the writer, in this study, does not very much focus on observing how much the functions have been mastered. He wants to pay more attention on the positions or the distributions of "to be" functioning either as a linking or a full verb, "to be" and other auxiliary verbs (can, may, must, shall, will, have, has, and the likes), and "to do" as an auxiliary included its inflection. In other words, the writer focuses his study not on the functions but on the right or acceptable order of the words that build up a dependent wh- interrogative clause

There are thirty two items in the test. Sixteen items belong to translation type and the other sixteen items belong to transformation type. The pupils are instructed to translate the clauses which are underlined into good English. Those which are not underlined are

---

<sup>31</sup> Steven J. Molinsky, Side By Side 2 (Englewood, N.J.: Prentice-Hall, Inc., 1981), p.p. 113 - 121.

already translated in the answersheet to save time. A list of difficult words or phrases is provided to help the students find out the suitable words or phrases for their translation. The tenses that should be used are also clearly listed. These are all important for the study itself is not aimed at testing the students' skill in translation but rather investigating the word order of the dependent wh- interrogative clauses. In the second sixteen items, the pupils are requested to finish the B's answer which is not complete yet by combining it with that of the question asked by A. The incomplete answers are also already written in the answersheet to save time. The time provided to finish the test is 40 minutes at maximum. Five minutes are used in advanced for introduction.

For reason already stated, the purpose of this study is not to test the pupils' language ability in general but to see how much the pupils have mastered the dependent wh- interrogative clauses. No wonder, therefore, if the instructions of the test are written in Indonesian. It is done so to avoid errors caused by students' misunderstanding of the language instructions. The writer's belief said that most pupils still find difficulties in understanding the English instructions.

### 3.3.2. The Trying out of the Test

A test collecting data should be tried out first to know whether the test made is suitable for the coming respondents (in this case, the respondents that will be taken from the fifth semester students of SMA: Physical and Social Departments) or not, and also to see whether it is valid and reliable. These three characteristics should exist in the test if a researcher is to obtain representative data.

In line with the opinion pointed out above, the test was tried out before it was administered to collect data. It was tried out to forty fifth semester students of SMA 3 Yogyakarta. Twenty students were taken from social department and the remainings (20 students) were taken from physical department. The test try-out itself was conducted on August 27<sup>th</sup>, 1984, while the time allocated was 40 minutes. Before the testees did the test, they were given an explanation of how to do it. It took five minutes to explain it.

To see whether the test constructed possesses adequate characteristics (suitability, validity, and reliability) or not, let us now analyse the results of the test try-out.

### 3.3.3. The Analysing of the Results of the Test Try-out

Since this study is very much dependent upon the instrument used, a very important question to ask is

whether the instrument used is suitable for the testees or not. Besides, it should be checked for its validity and reliability. Now let us analyse these three criteria one by one.

### 3.3.3.1. The Suitability of the Test for the Respondents

A test collecting data should not be too difficult or too easy. If it is too difficult or too easy, the data obtained through it will not be valid, and consequently, the results of the study will be questionable.

To know whether the test employed is suitable for the coming respondents, the test constructed is then tried out. After the test try-out, it was found that most of the students finished the test on time, and the average score is counted 21.67<sup>32</sup>. It means that the students can do averagely 67.71% of the whole items in the test. Based on this percentage, it can be concluded that the test constructed is suitable for the coming respondents in terms of the level of the difficulty.

### 3.3.3.2. Reliability and Validity

It has been widely approved that a good test should be reliable and valid. Donald Ary states that re-

---

<sup>32</sup>The tabulation of the test scores of the test try-out and the computation of the average score is presented in appendix III.

liability and validity are the most important criteria for measuring devices<sup>33</sup>. Robert Lado suggests that for a test to be valid it must first of all be reliable<sup>34</sup>. Another expert, J.B. Heaton, also states that reliability is a necessary characteristic for any good test: for it to be valid at all, a test must first be reliable as a measuring instrument<sup>35</sup>. To know whether the test used in this study is valid and reliable or not, the followings are the discussion of the test reliability and validity.

### 3.3.3.2.1. Reliability of the Test

J.B. Heaton suggests that in order to be reliable, a test must be consistent in its measurement<sup>36</sup>. The same idea is indicated by Robert Lado. He states that reliability has to do with the stability of the test scores for the same individual<sup>37</sup>. If the same test is given to the same students on Tuesday and two weeks afterwards, and the scores obtained by the students from the two tests show little variation, it can be

---

<sup>33</sup>Donald Ary, Introduction to Research in Education (New York: Holt, Rinehart and Winston, Inc., 1973), p. 210.

<sup>34</sup>Robert Lado, Language Testing, (London: Longman Group Ltd., 1961), p. 330.

<sup>35</sup>Heaton, op. cit., p. 155.

<sup>36</sup>ibid.

<sup>37</sup>Lado, Language Testing, loc. cit.



judged that the test is reliable. On the otherhand, if the test given on Tuesday yields significantly different results from it when it is administered two weeks later, it can be judged that the test is not reliable.

Why should a test reliable? To answer this question, Robert Lado states that a test should be reliable for an unreliable test does not measure anything<sup>38</sup>.

There are many ways to estimate the reliability of a test. Among others, the most widely used in practice are the retesting method, the alternate-forms method, the inter-item consistency method, and the split-half method<sup>39</sup>. The method employed in this study is the latter method, that is, the split-half method. Computed using this method, the coefficient of reliability of the test constructed in this study is 93<sup>40</sup>. Since a home-made test is already acceptable if it has a reliability coefficient of .70 to .80<sup>41</sup>, the figure above indicates that the test is reliable a great deal and, therefore, can be employed to conduct further study.

---

<sup>38</sup>Ibid.

<sup>39</sup>Lado, Language Testing, op. cit., p.p. 332 - 337.

<sup>40</sup>The computation of the coefficient of reliability is presented in appendix IV,

<sup>41</sup>David P. Harris, Testing English as a Second Language (New York: McGraw-Hill, 1969), p. 17.

### 3.3.3.2.2. Validity of the Test

According to Robert Lado<sup>42</sup>, validity is essentially a matter of relevance. J.B. Heaton<sup>43</sup> also states that the validity of the test is the extent to which it measures what it is to measure and nothing else. Sutrisno Hadi<sup>44</sup> classifies kinds of validity into five different categories, i.e.: face validity, logical validity, factorial validity, content validity, and empirical validity. The kind of validity applied in this study is the empirical one. According to J.B. Heaton<sup>45</sup>, this validity is obtained as a result of comparing the results of the test with the results of some criterion measure such as:

- (1) an existing test, known or believed to be valid and given at the same time; or
- (2) the teacher's ratings or any other such form of independent assessment given at the same time; or
- (3) the subsequent performance of the testees on certain task measured by some valid tests; or
- (4) the teacher's ratings or any other such form of independent assessment given later.

In short, empirical validity is a way to see

---

<sup>42</sup>Lado, op. cit., p. 321.

<sup>43</sup>Heaton, op. cit., p. 153.

<sup>44</sup>Sutrisno Hadi, Metodologi Research 2 (Yogyakarta: Universitas Gajah Mada, 1979), p.p. 111 - 116.

<sup>45</sup>Heaton, op. cit., p. 154.

the relevance of a test by comparing the results of the test with the thing being measured. Suppose a test is designed to predict the students' ability in learning English. To know whether the test is empirically valid, the results of the test must be compared with the future results of the students in learning English. If there is a positive relationship between the predictions and the reality, meaning that, if the students who score high in the test really show good results in learning English, it can be concluded that the test constructed is valid.

There is a certain technique to find the relationship between the prediction and the reality, i.e.: by applying the so-called correlation formula. Using the example previously stated, the results of the test are correlated using the formula with the results of the students in learning English. If there is a significant correlation between the test scores and the students results in learning English, then, it can be justified that the test constructed is empirically valid.

About this way of validating a test, David Harris<sup>46</sup> says that:

"The best way to check the actual effectiveness of a test is to determine how the test scores are related to some independent, out-side criterion such as marks given at the end of a course or instructors' or supervisors' ratings. If evidence shows that there is a high correlation between the test scores and a trustworthy external criterion, we are justified in putting our confidence in empirical validity of the test."

---

<sup>46</sup>Harris, op. cit., p.p. 19 - 20.

Following Harris' idea, the test constructed in this study is tried out to forty fifth semester students of SMA Negeri 3 - Yogyakarta. The results are then correlated using the Pearson's product moment correlation formula with the final English scores of the same students given at the end of the fifth semester and which are provided by a regular English teacher of the school. The correlation analysis results in .93 coefficient of correlation<sup>47</sup>. Since this figure indicates high correlation between the test scores and the final English scores, it is concluded that the test that is going to be employed is quite valid to collect the data needed for this study.

----- 00000 -----

---

<sup>47</sup>The computation of the coefficient of correlation is presented in appendix V.

# CHAPTER IV

## TREATMENT OF THE DATA

### AND

### INTERPRETATION OF FINDINGS

In this chapter the readers will be set before raw data of the test. It is done so in purpose to enable them to read through the data conscientiously. By reading through the data conscientiously, the readers, later will be expected to follow the writer either to reject or to confirm the two hypotheses stated in the beginning of the thesis. Besides, the readers will own an idea of the SMA students' mastery in manipulating words to construct dependent wh-interrogative clauses. The mean score of the students' scores will be counted as well to see the percentage of those who can obtain the scores above and below the mean score. Furthermore, the writer will present all possible answers of each item in the test: both the acceptable and the unacceptable answers. Predictions on the possible sources of errors can be carried out if only the possible answers are already

carefully analysed. To analyse here means to examine the possible answers carefully in order to predict what makes the students' utterances grammatically wrong or unacceptable. In other words, we can question: "What makes the students produce such non-standard English utterances?"

The writer will also count the percentage of each type of error as to see their occurrences. By knowing the percentage of the occurrence of each type of error, we -teachers of English- hopefully can better our teaching strategy especially the teaching strategy in presenting the topic being discussed in this study.

#### 4.1. THE FIRST RAW DATA OF THE TEST

For reasons already stated: to make the readers read through the data of the test conscientiously and to make the readers more easily own an idea of the students' mastery in manipulating words to construct a dependent wh- interrogative clause, the first data (the scores of the respondents) are therefore tabulated from high to low. The data can be observed through the following pages.

**TABLE III:**

SUBJECTS	CORRECT ITEMS	SCORES	PERCENTAGES
1	32	100	100%
2	32	100	100%
3	32	100	100%
4	32	100	100%
5	30	93.75	93.75%
6	30	93.75	93.75%
7	30	93.75	93.75%
8	30	93.75	93.75%
9	30	93.75	93.75%
10	30	93.75	93.75%
11	30	93.75	93.75%
12	30	93.75	93.75%
13	30	93.75	93.75%
14	28	87.50	87.50%
15	28	87.50	87.50%
16	28	87.50	87.50%
17	28	87.50	87.50%
18	28	87.50	87.50%
19	28	87.50	87.50%
20	28	87.50	87.50%
21	28	87.50	87.50%
22	28	87.50	87.50%
23	28	87.50	87.50%
24	28	87.50	87.50%
25	26	81.25	81.25%
26	26	81.25	81.25%

27	26	81.25	81.25%
28	26	81.25	81.25%
29	26	81.25	81.25%
30	26	81.25	81.25%
31	26	81.25	81.25%
32	26	81.25	81.25%
33	26	81.25	81.25%
34	24	75	75%
35	24	75	75%
36	24	75	75%
37	24	75	75%
38	24	75	75%
39	24	75	75%
40	24	75	75%
41	24	75	75%
42	24	75	75%
43	24	75	75%
44	24	75	75%
45	24	75	75%
46	24	75	75%
47	24	75	75%
48	24	75	75%
49	23	71.87	71.87%
50	23	71.87	71.87%
51	23	71.87	71.87%
52	23	71.87	71.87%
53	23	71.87	71.87%
54	22	68.75	68.75%



55	22	68.75	68.75%
56	22	68.75	68.75%
57	22	68.75	68.75%
58	22	68.75	68.75%
59	22	68.75	68.75%
60	22	68.75	68.75%
61	22	68.75	68.75%
62	22	68.75	68.75%
63	22	68.75	68.75%
64	22	68.75	68.75%
65	22	68.75	68.75%
66	22	68.75	68.75%
67	22	68.75	68.75%
68	21	65.62	65.62%
69	21	65.62	65.62%
70	21	65.62	65.62%
71	21	65.62	65.62%
72	20	62.50	62.50%
73	20	62.50	62.50%
74	20	62.50	62.50%
75	20	62.50	62.50%
76	20	62.50	62.50%
77	20	62.50	62.50%
78	20	62.50	62.50%
79	19	59.37	59.37%
80	19	59.37	59.37%
81	19	59.37	59.37%
82	18	56.25	56.25%
83	18	56.25	56.25%

84	18	56.25	56.25%
85	18	56.25	56.25%
86	18	56.25	56.25%
87	18	56.25	56.25%
88	18	56.25	56.25%
89	18	56.25	56.25%
90	18	56.25	56.25%
91	18	56.25	56.25%
92	18	56.25	56.25%
93	18	56.25	56.25%
94	17	53.12	53.12%
95	17	53.12	53.12%
96	17	53.12	53.12%
97	16	50	50%
98	16	50	50%
99	16	50	50%
100	16	50	50%
101	16	50	50%
102	16	50	50%
103	16	50	50%
104	16	50	50%
105	16	50	50%
106	16	50	50%
107	16	50	50%
108	16	50	50%
109	16	50	50%
110	16	50	50%
111	16	50	50%
112	16	50	50%

113	16	50	50%
114	16	50	50%
115	16	50	50%
116	16	50	50%
117	16	50	50%
118	16	50	50%
119	16	50	50%
120	16	50	50%
121	16	50	50%
122	16	50	50%
123	16	50	50%
124	16	50	50%
125	16	50	50%
126	15	46.87	46.87%
127	15	46.87	46.87%
128	15	46.87	46.87%
129	15	46.87	46.87%
130	15	46.87	46.87%
131	15	46.87	46.87%
132	15	46.87	46.87%
133	14	43.75	43.75%
134	14	43.75	43.75%
135	14	43.75	43.75%
136	14	43.75	43.75%
137	14	43.75	43.75%
138	14	43.75	43.75%
139	14	43.75	43.75%
140	14	43.75	43.75%
141	14	43.75	43.75%

142	14	43.75	43.75%
143	14	43.75	43.75%
144	14	43.75	43.75%
145	14	43.75	43.75%
146	14	43.75	43.75%
147	14	43.75	43.75%
148	14	43.75	43.75%
149	14	43.75	43.75%
150	14	43.75	43.75%
151	14	43.75	43.75%
152	14	43.75	43.75%
153	14	43.75	43.75%
154	14	43.75	43.75%
155	14	43.75	43.75%
156	14	43.75	43.75%
157	14	43.75	43.75%
158	14	43.75	43.75%
159	13	40.62	40.62%
160	13	40.62	40.62%
161	13	40.62	40.62%
162	12	37.50	37.50%
163	12	37.50	37.50%
164	12	37.50	37.50%
165	12	37.50	37.50%
166	12	37.50	37.50%
167	11	34.37	34.37%
168	11	34.37	34.37%

---

---

#### 4.2. THE ANALYSIS OF THE DATA

From the writer's point of view and as far as this study concerns, the data tabulated above are considered adequate to confirm or to reject the first hypothesis stated in the beginning of this study.

The minimum score a learner should achieve, so as not to undergo a remedial teaching, is 75 on a 0-100 scale. If this minimum score is obtained by at least 40% of the respondents, it means that the teaching topic discussed in this study has been effectively and efficiently taught. However, the data obtained prove that only 48 respondents acquired scores above 75, while the total respondents are 168. It means that those who did the test well are just 28% of the respondents. The remainings, 72% of the respondents (120) do experience difficulty in learning the dependent wh-interrogative clauses.

Though the number of those who score 75 up is still far from being satisfactory (28% versus 40%), the percentage of those who are above the mean score is considered fairly good. The following is the computation of the mean score of the students' scores tabulated above.

##### 4.2.1. Mean Score of the Test

In line with the first hypothesis of this study, the writer thinks that the students' difficulty in learning the topic being discussed in this study can also be

observed from the mean score. The higher the mean score is, the better the students acquire the teaching items taught.

This study proves that more than 50% of the respondents still obtained the scores below the mean score which is actually not satisfactory. To measure the mean score the following steps are carried out:<sup>48</sup>

Step 1: Arranging scores in a frequency distribution by:

- a) subtracting the lowest score (34) from the highest one (100),
- b) dividing the resulting score (66) into ten groups to decide the length interval (i):  

$$i = 66 : 10$$

$$= 6.6$$

$$= 7$$
- c) tallying the number of scores falling in each group,
- d) totaling and entering them in a column headed frequency (f).

Step 2: a) deciding the assumed mean (AM): the midpoint of the score group,

- b) calling the next higher score group from AM : +1, +2, ... and the lower group: -1, -2, ...; and putting them in a column headed deviation ( $x'$ )

---

<sup>48</sup>Harris, op. cit., p. 136.

- c) multiplying frequency with deviation ( $f \cdot x'$ ) and putting the result in a column headed frequency deviation ( $fx'$ ),
- d) the last column is  $fx'^2$ ,
- e) finding the sum of the positive and negative  $fx'$ ; then dividing this sum by the number of the scores (N) as stated in the following formula:

$$c = \frac{fx'}{N}$$

where: c is the score correction

- f) calculating the mean score using the following formula:

$$M = AM + ci$$

where:

$$M = \text{Mean}$$

$$AM = \text{Assumed Mean}$$

$$i = \text{the length of interval}$$

$$c = \text{the score correction}$$

calculation:

p.t.o.

TABLE: IV

SCORE GROUPS	FREQUENCY F	DEVIATION x'	fx'	fx' <sup>2</sup>
94 - 100	13	+6	78	468
87 - 93	11	+5	55	275
80 - 86	9	+4	36	144
73 - 79	15	+3	45	135
65 - 72	23	+2	46	92
58 - 64	10	+1	10	10
51 - 57	15	0	0	0
44 - 50	62	-1	-62	62
37 - 43	8	-2	-16	32
30 - 36	2	-3	-6	18
N= 168			186	1236

$$c = \frac{fx'}{N}$$

$$= \frac{186}{168}$$

$$= 1.1$$

$$i = 7$$

$$AM = 54$$

$$ci = c \cdot i$$

$$= 1.1 \times 7$$

$$= 7.7$$

$$M = AM + ci$$

$$= 54 + 7.7$$

$$= 61.7$$



#### 4.3. REJECTION OR CONFIRMATION FOR THE FIRST HYPOTHESIS

As calculated above, the mean score of the students' score is 61.7. If we observe the raw data once again, then we can point out that there are only 78 respondents who are above the mean score and the remainings (90 respondents) get scores less than 61.7. Briefly speaking, 46% of the respondents score 61.7 up and the other 54% score less than 61.7.

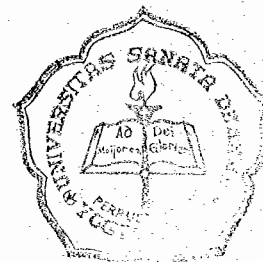
Having observed the findings which are elaborately calculated above, we can come to a final justification, i.e.: whether to confirm or to reject the first hypothesis. Since the percentage of those who can do the test satisfactorily is just counted 28% (75 respondents out of 168 respondents), the first hypothesis is, therefore, clearly confirmed. That means the students of SMA do experience difficulty in learning the dependent wh-interrogative clauses officially stated in the curriculum of SMA 1975. Better teaching strategies are, therefore, absolutely required if we, teachers of English, want the students of SMA to acquire this teaching item more satisfactorily. The suggested teaching strategies in presenting this teaching item will be verified in the next chapter.

#### 4.4. THE SECOND RAW DATA OF THE TEST

Our next concern is to find out types of errors and their possible causes or sources. It will be impossible for us, however, to predict the possible sources of the students' errors without firstly analysing the types of errors the students have done. To enable us to identify the types of the errors, the possible answers of each item which are produced by the students will be presented in this chapter as they are functioning as other data to be analysed. By analysing the possible answers of the thirty two items administered in the test, hopefully we can come to the rejection or the confirmation of the second hypothesis which assumes that students of SMA commit various types of errors in learning the dependent wh- interrogative clauses and that inversion error is the most common and striking error committed.

By possible answers the writer means all answers which are possibly produced by the respondents. As a result, there will be only one acceptable answer and one, two, three, or four unacceptable answers which are, by all means, grammatically wrong though they are communicative to some extent.

In order to make the explanation above more clearly understood, let us now observe the possible answers of item number 1):



1). Pak guru ingin mengetahui siapa yang sakit kemarin.

This item has the following possible answers:

1a) The teacher wants to know who was sick yesterday.

1b)\* The teacher wants to know who sick yesterday.

1c)\* The teacher wants to know who sick yesterday was.

Undoubtedly, the correct/ acceptable answer is number 1a.

However, those who answered either number 1b or 1c did believe, at the time they wrote it out, that their answer was of the best one.

Based on the writer's analysis on the test administered, the learners' failure in mastering the dependent wh- interrogative clauses is not due to the words or phrases to be translated (semantic problem), but it is rather on how to arrange the words or phrases correctly (syntactical problems). No wonder, therefore, if the students commit errors as what are seen above ( 1b and 1c ). The following are the possible answers of the thirty two items which are administered in this study<sup>49</sup>.

1a The teacher wants to know who was sick yesterday.

1b\* sick yesterday.

1c\* sick yesterday was.

2a They don't know who is inside now.

2b\* inside now.

2c\* inside now is.

---

<sup>49</sup>Wrong responses are those which are asterisked.

- 3a Sorry, Sir. I can't guess how old Big Ben is actually.  
 3b\* Big Ben actually.  
 3c\* is Big Ben actually.
- 4a Can you tell me where your parents are now?  
 4b\* your parents now?  
 4c\* are your parents now?
- 5a Do you know who is singing next door?  
 5b\* singing next door?  
 5c\* singing next door is?
- 6 They didn't tell me who must clean all the dishes.
- 7a I think he can tell you where you can get your hair cut.  
 7b\* can you get your hair cut.  
 7c\* you can to get your hair cut.  
 7d\* do you can to get your hair cut.
- 8a Can you tell me what I should do if I lose anything valuable?  
 8b\* should I do if I lose anything valuable?
- 9a You can directly ask her who taught her English.  
 9b\* did teach her English.  
 9c\* was taught her English.
- 10a I have no idea what makes youngsters like loud music.  
 10b\* does make youngsters like loud music.  
 10c\* is makes youngsters like loud music.
- 11a His question is who did not study English last night.  
 11b\* not studied English last night.  
 11c\* was not studied English last night.

12a I don't know who does not like greasy food.

12b\* not like greasy food.

12c\* is not like greasy food.

13a I don't know how often she goes to the library.

13b\* does she go to the library.

13c\* she is goes to the library.

13d\* is she goes to the library.

13e\* she go to the library.

14a Please ask her when Christmas holiday starts.

14b\* does Christmas holiday start.

14c\* Christmas holiday is starts.

14d\* is Christmas holiday starts.

14e\* Christmas holiday start.

15a Can you tell me why they did not call the police?

15b\* they not called the police?

15c\* did not they call the police?

15d\* they were not called the police?

15e\* were not they called the police?

16a Try to tell me frankly why she does not love me anymore.

16b\* she not love me anymore.

16c\* does not she love me anymore.

16d\* she is not loves me anymore.

16e\* is not she loves me anymore.

Next we just encounter two possible answers for each item, except items 23, 29, and 30. They respectively have three possible answers. While items 21, 22, 25, 26, 27 & 28 respectively have one possible answer, that is, the correct one. No one committed errors in those six items.

17a) Sorry, Sir. I have no idea  
which one is more interesting.

17b)\* which one more interesting is.

18a) Sorry, Madam. I can't tell you  
who is bored with your subject.

18b)\* who bored with your subject is.

19a) To tell you the truth, I really don't know  
what her name is.

19b)\* what is her name.

20a) I have no idea who those guys are.

20b)\* who are those guys.

21a) I have no idea who has stolen her bag.

22a) Please ask the teacher who should be responsible for  
such a case.

23a) I've forgotten when Santa Claus is going to come.

23b)\* when is Santa Claus going to come.

23c)\* when Santa Claus going to come is.

24a) Sorry, Sir. I'm not sure  
how long my parents have been married.

24b)\* how long have my parents been married.

25a) I'll ask him who wants to go for a walk.

26a) Nobody has told me what makes people fat.

27a) Sorry, Madam. I can't remember who didn't attend the meeting.

28a) You'd better ask the captain of the class who doesn't like to participate in the seminar.

29a) I'm not sure what time the movie begins.

29b)\* I'm not sure what time does the movie begin.

29c)\* I'm not sure what time the movie begin.

30a) I can't remember when the First World War began.

30b)\* I can't remember when the First World War begin.

30b)\* I can't remember when did the First World War begin.

31a) I really don't know. You had better ask her directly why she doesn't like to get married soon.

31b)\* why doesn't she like to get married soon.

32a) Sorry, Sir. I can't remember what kind of food she doesn't like.

32b)\* what kind of food doesn't she like.

#### 4.5. THE ANALYSIS OF THE SECOND DATA

The data compiled above will mean nothing if they are not carefully analysed and then interpreted. Data will remain data, by all means, they still cannot be employed either to reject or to confirm the hypothesis which assumes that inversion error is the most striking type of error among other types of errors committed by the students of SMA when they are learning dependent wh-interrogative clauses. Due to this scientific reason the analysis of the second data is conducted in this phase.

Technically speaking, before the errors are identified, they are classified first in accordance with the nature of the errors themselves. Based on the result of the analysis of the data compiled, the writer brings forward seven types of errors which are proved to be committed by the students of SMA when they are learning dependent wh- interrogative clauses. The seven types of errors pointed out are as follows:

- 4.5.1. Inversion Errors,
- 4.5.2. Redundancy Errors,
- 4.5.3. Errors in terms of Misplacement of To Be,
- 4.5.4. Errors in terms of Omission of To Be,
- 4.5.5. Agreement Errors,
- 4.5.6. Errors in terms of Omission of To Do, and
- 4.5.7. Beverb Errors.

Only if the errors found in the possible answers are identified, can we proceed with a further analysis : interpretation of those kinds of errors. This job should



be conducted if eventually we are to reach the point of predicting the possible sources of errors satisfactorily. The interpretation is done with the following techniques:

- (a) comparing the English pattern of the topic being discussed with the Indonesian pattern of the same topic,
- (b) comparing the English pattern of the topic being discussed with the previously similar pattern acquired in the target language, and
- (c) observing the students' utterances within their written productions.

By these three techniques, the writer is then able to predict the possible sources of errors and eventually he is able to suggest types of exercises dealing with the teaching item discussed in this study. The suggested types of exercises are supposed to be given to the students in order to eliminate their errors - at least to reduce them.

Before we come to the suggested types of exercises, let us now analyse and interpret the errors listed above one by one.

#### 4.5.1. Inversion Errors

By inversion errors the writer means the errors which are identified as the result of either the subject-verb inversion or the subject-operator inversion which still retains in a dependent wh- interrogative clause in a complex sentence. The respondents' errors which are

from now on termed inversion errors can be observed through the second data<sup>50</sup>.

If all respondents do those items correctly, there will be 2,688 possible correct answers<sup>51</sup>. Since there are 1,120 erroneous responses from those sixteen items, this type of error is counted 41.6% of the possible correct answers<sup>52</sup>. It implicitly means that the average percentage of the students per class who are likely to commit such a type of error is 41.6%.

The deviant sentences which are caused by either the subject-verb inversion or the subject-operator inversion which still retains in the dependent wh- interrogative clauses are what may be called interlanguage errors; these errors are caused by language transfer. In other words, the erroneous responses above are caused by the interference of the learner's mother tongue. It is also acknowledged that not only does the learner's mother tongue influence the learner's sentence productions, but the language the learner has mastered influences the learner's sentence productions as well. That is why, the writer assumes, the Javanese, as most of the respondents are Javanese, and the Indonesian are very influential here.

---

<sup>50</sup>See the second data responses: 3c, 4c, 7b, 8b, 13b, 14b, 15c, 16c, 19b, 20b, 23b, 24b, 29b, 30b, 31b, 32b.

<sup>51</sup>The number of the respondents (168) multiplied by the number of the items concerned (16).

<sup>52</sup>The number of the incorrect responses divided by the possible correct answers then multiplied by 100%.

In Javanese, the following utterances are communicative, and what is more, are grammatically acceptable.

- Aku ora ngerti geneya dheweke ora ngundang polisi.
- Ndak kira dheweke bisa ngandhani jam pira bapake biasane kondur.

In Indonesian, the following utterances are also communicative and grammatically acceptable.

- Saya tidak tahu mengapa dia tidak memanggil polisi.
- Saya kira dia bisa memberi tahu anda jam berapa ayahnya biasanya pulang.

The four non-English sentences above are what may be termed complex sentences. Clauses which are placed before the question words are formally termed independent clauses, whereas clauses which are introduced by the question words are formally termed dependent clauses. Grammarians also term the complex sentences above indirect questions as to distinguish them from the so-called direct questions. A direct question which is converted into an indirect question will change nothing either in terms of position or verb modification. In a word, if we want to combine two clauses by which one is dependent and the other one is independent to construct an indirect question, we simply combine them without thinking of any necessary changes. However, the concept is not always valid when we are learning English. In English we may question:

- Why didn't they call the police?

- When does his father usually come home?

Nevertheless, we cannot simply embed the direct question (Why didn't they call the police OR When does his father usually come home?) in the independent clause (for example: I don't know) if we want to convert it into an indirect question. We have to make some changes.

If we want to convert "Why didn't you call the police?" into the indirect question, we have to shift "didn't" so that it will not precede the subject of the clause (they) but to occupy the position after "they". If we want to combine "I think he can tell you" with "When does his father usually come home?", we have to omit "does" and in consequence of this omission we have to add "-s" to "come". The former is what may be called a change in terms of position, while the latter is a change in terms of verb-modification. Both in formal Javanese and formal Indonesian we never encounter such changes. And this is actually the source of the inversion errors.

Another possibility that can be the cause of such errors is the so-called over-generalization. The inversion errors are caused by over-generalization if the deviant structures created by the learner are based on his/her past experience of other structures in the target language itself. Here, the learner makes use of a previously acquired rule in a new situation. How can it be?

It is a fact that questions introduced by the wh-elements (what, who, whom, why, where, when, which, and

how ...<sup>53</sup>) have been officially taught since the learner was still in SMP (Junior High School). No wonder, therefore, if the common word-order after the wh- elements has been deeply implanted in the learner's mind or memory. The subject-verb inversion or the subject-operator should be retained if s/he is to construct correct acceptable questions. Backed by this belief, a learner of English will easily overgeneralize the order of the words after the wh- elements. S/he does not realize if s/he is dealing with the indirect questions. Since that false belief has been embedded for a long time and due to the difficulty in erasing that belief, some students still commit the type of error spelt out above.

#### 4.5.2. Redundancy Errors

By redundancy errors the writer means the errors which are the result of the unnecessary appearance of "to do" which immediately follows the wh- element; and yet, the wh- element functions as the subject of the dependent clause. The unacceptable pattern, therefore looks like the following:

Independent Cl. + Wh- element + To Do + Verb Stem + ... .

This pattern is of course grammatically unacceptable, though it is still communicative. The respondents' errors which are from now on termed redundancy errors can be

---

<sup>53</sup>how many, how much, how long, how old, how high, how tall, etc.

examined on the second data presented before<sup>54</sup>.

Based on the writer's analysis, this type of error resides in the second rank. As we can see in the test administered, there are actually four items that can lead the respondents to commit such an error. Two items belong to part I (items 9 and 10) and the other two belong to part II (items 25 and 26). Since none of the respondents committed such an error in part II, the items used to count the percentage of this type of error are just those which belong to part I. Thus, there are 336 possible correct answers. As the total of errors of this type is 128, this type of error is, then, 38.09%. It implicitly means that the average percentage of the students per class who are likely to commit such an error is 38.09%. What makes a learner commit such an error then?

Based on his study, the writer, then, comes to a conclusion. It confirms that the respondents have got a wrong concept. Their wrong concept which has been deeply embedded in their mind states: "When a question is introduced by a wh-element, and in addition, it contains a full verb, except "to be", "to do" (do, does, or did) should be placed immediately after the wh-element". Those students have forgotten that a question introduced by a wh- element can also be constructed without the existence of "to do" in it; that is when the wh- element concerned functions as the subject of the clause. If this is really

---

<sup>54</sup>See the responses on the second data (9b and 10b).

true, the source of the redundancy errors is a false concept hypothesized. This false concept hypothesized might be the result of the respondents' poor understanding toward the functions of the wh- elements.

#### 4.5.3. Errors in terms of Misplacement of To Be

What is meant by errors in terms of misplacement of to be ? In short, they are simply and solely errors which are indicated as the result of the unacceptable final position of to be in a dependent wh- interrogative clause in a complex sentence functioning as an indirect question. Utterances the students produced are, therefore, grammatically unacceptable. The respondents' sentence productions illustrating this type of error can be examined on the second data<sup>55</sup>.

There are six items in the test that can lead the respondents to commit such an error. If all respondents do those items correctly, there will be 1,008 possible correct answers. Since there are 220 erroneous responses from those six items, this type of error is counted 21.8% of the possible correct answers. This percentage implicitly reveals that the percentage of those who still commit such an error in each class is 21.8%. What causes such an error then?

Observing the six responses pointed out by the

---

<sup>55</sup>See the responses on the second data (1c, 2c, 5c, 17b, 18b, and 23c).

newest footnote, it is clear for us that the respondents just overgeneralize all positions of "to be" in the dependent wh- interrogative clauses. This might be the consequence of the previous exercises which all of the time justify the final position of "to be". The followings are examples of the previous exercises which can lead the students to commit errors in terms of misplacement of "to be".

<u>MODEL</u> : Where is your father?	I have no idea
	where he is.
Who are those guys?	I have no idea
	who they are.

<u>STIMULUS</u> :	<u>RESPONSE</u> : I have no idea
Where are my keys?	where your keys are.
How much is it?	how much it is.
How old is this building?	how old it is.
Where were your parents	where my parents were
this morning ?	this morning.
etc.	etc.

Since some of the students, as a matter of fact, still do not own ample knowledge on the functions of the wh- elements, the above exercises will, no wonder, result in errors if they are required to convert the direct questions below into the indirect ones. Here are some examples that are treated exactly the same as they treat the above stimuli:

Who was sick yesterday?  
 Who is inside now?  
 Who is singing next door?  
 Which one is more interesting?  
 Who is bored with my subject?  
 Etc.

To be acknowledged, the respondents (21.8%) respond the stimuli above by applying their previously ac-



quired pattern, that is, placing "to be" at the end of the clause. Again here, they do not know that "to be" can also be placed immediately after the wh- element, that is, when the wh- element functions as the subject of the dependent clause.

To summarize, the students' failure to position "to be" appropriately is quite possibly caused by over-generalization. Why they easily overgeneralize the position of "to be" is possibly caused by their poor understanding of the functions of the wh- elements. Let us now observe the following illustration. We can see here that the learner creates deviant sentences in the basis of his or her past learning experience of another structure in the target language.

I have no idea where she is LEADS TO

\*I have no idea who inside is.

Can you tell me where your mother was this morning

LEADS TO

\*Can you tell me what interesting was.

Etc.

#### 4.5.4. Errors in terms of Omission of To Be

What is meant by omission of "to be" here is the absence of "to be" from a dependent wh- interrogative clause by which "to be" is grammatically required. A dependent wh- interrogative clause is judged to be grammatically unacceptable if it does not contain "to be" which is grammatically required. The "to be" we are discussing

here can function either as a linking verb, a full verb, or an auxiliary verb. The respondents' errors can be observed through the second data<sup>56</sup>.

Actually there are ten items involving the use of "to be" which are included in the test administered. Five items belong to part I and the other five items belong to part II. Since none of the respondents committed errors of this type in responding the five second items, for this discussion, they are neglected. Thereby, if all of the respondents do the items correctly, there will be 840 possible correct answers. Since there are found 155 erroneous responses from the first five items, this type of error is counted 18.45% of the possible correct answers. This percentage implicitly reveals that there are still 18.45% of the students who all of the time commit such an error in each class. What actually makes the students commit such an error?

Based on his study, the writer can enlighten that the deviant responses concerning the first five items (1b, 2b, 3b, 4b, and 5b) are quite possibly caused by language transfer. It is a fact that the respondents translate the underlined clauses word by word. Since the Indonesian language does not own the so-called "to be", some of the respondents still fail to insert "to be" in their sentence productions. Let us now observe the fol-

---

<sup>56</sup> See the responses on the second data (1b, 2b, 3b, 4b, and 5b).

lowing Indonesian sentences and their accompanying English translations.

- (1) Siapa (yang) sakit kemarin?  
Who sick yesterday?
- (2) Siapa (yang) di dalam sekarang?  
Who inside now?
- (3) Berapa usia Big Ben sebenarnya?  
How old Big Ben actually?
- (4) Dimana orang tua anda sekarang?  
Where your parents now?
- (5) Siapa (yang) sedang menyanyi di ruang sebelah?  
Who singing next door?

However, the respondents' errors concerning item number 5, a question in which its tense is present continuous, is convinced not to be the result of language transfer. They are possibly the consequence of incomplete application of rules. Some students still miss the required "to be" because the rule of the present continuous tense has not been well mastered. It is likewise due to the lack of practice and exposure.

#### 4.5.5. Agreement Errors

By agreement errors are meant errors which are identified as the result of the respondents' failure in supplying a formal agreement (-s OR -es) immediately after the present tense of a verb when the subject of the dependent wh- interrogative clause is a third person singular or its equivalence and in supplying a correct past tense form of a verb when the action expressed by the verb happens at a specified time in the past. Thus

the respondents' responses will be judged erroneous if they do not meet the requirements defined above. The respondents' agreement errors can be examined on the second data<sup>57</sup>.

There are four items in the test that can lead the respondents to commit the so-called agreement errors. If all respondents do those four items correctly, there will be 672 possible correct answers. Since there are 78 erroneous responses from those four items, this type of error is, therefore, 11.6% of the possible correct answers. It implicitly means that there are still 11.6% of the students per class who all of the time commit such an error. What actually causes the students to commit such an error then?

After a careful study on those four items, the writer puts forward two possible sources of the errors being discussed in this phase. The two possible sources which might lead the respondents to commit such an error are : (A) language transfer, and

(B) carelessness or negligence.

#### (A) Language Transfer

So far, it has much of the time been spelt out in some detail that some students just translate the Indonesian utterances directly into English regardless of

---

<sup>57</sup>See the responses on the second data (13e, 14e, 29c, and 30c).

the target language consensus or agreement. This statement is true because when the students have to translate an Indonesian verb, just say "pergi", they will soon translate it into "go". Indeed, they have forgotten that "pergi" can also be translated into either go(-es), or went, or gone depending widely upon the formal agreement (concord of tense and of person). The facts shows that the infinitive verb form<sup>58</sup> is more dominantly implanted in the students' memory, whereas the other verb forms (past and past participle verb forms)<sup>59</sup> seem to be more difficult to be recalled. Let us observe the following illustrations:

(13) ... seberapa sering dia pergi ke perpustakaan.  
       ... how often            she go        to the library .

(14) ... kapan liburan Natal mulai.  
       ... when    Christmas holiday begin.

Above, we can see that direct translation does occur in some students' learning strategy.

#### (B) Carelessness or Negligence

The agreement error can be judged as the result of the learner's carelessness or negligence if only s/he is not consistent in converting direct questions which actually belong to the same pattern. This is true, for some of the time s/he converts them correctly and some

---

<sup>58</sup>Examples of the infinitive verb forms: go, begin, start, call, come, etc.

<sup>59</sup>Examples of the past verb forms: went, began, etc., and examples of the past participle verb forms : gone, begun, started, called, come, etc..

other time s/he converts them incorrectly. Let us now observe the two resulted indirect questions:

(13) I don't know how often she goes to the library.

(14) Please ask her when Christmas holiday begin.\*

Above we can notice that s/he can acceptably do item 13, but then s/he commits a grammatical error when s/he does item 14. This is also the case when some of the respondents did items 29 and 30.

(29) I'm not sure when they got engaged.

(30) I can't remember when the First World War begin.

Those respondents did not commit a grammatical error when they converted item 29. However, when they did item 30, they converted differently. These errors, as far as the writer analyses, are not caused by any sources of errors except their own carelessness or negligence. This is true, because when they were asked why they wrote such verb forms (items 14 and 30) they immediately realize that they had committed errors, and what is more, they knew how to correct them.

To summarize, agreement errors are caused by language transfer when they are committed consistently to direct questions which belong to the same pattern and are caused by the learner's carelessness or negligence when they are committed inconsistently to direct questions which actually share the same pattern.

#### 4.5.6. Errors in terms of Omission of To Do

What are meant by errors in terms of omission of to do actually? Briefly speaking, they are errors which are indicated as the result of the absence of to do from a dependent wh- interrogative clause, and yet to do (do, does, or did as an auxiliary) is grammatically required. The respondents' responses to the test illustrating this type of error can be observed through the second data<sup>60</sup>.

As can be observed through the made-test, there are eight items involving the use of to do that can lead the respondents to commit an error which is from now on identified as an error in terms of omission of to do or just simply termed "omission of to do". Four items (11 , 12 , 15 , 16 ) belong to part I, while the other four (27, 28, 31, and 32) belong to part II. As none of the respondents committed this type of error in responding the second four items, the writer then decides not to discuss those four items in this section. Thus, there are 672 possible correct answers only. Since there are 60 erroneous responses from the first four items, this type of error is found 8.9% of the possible correct answers. This percentage implicitly reveals that there are still 8.9% of the students in each class who all of the time com-

---

<sup>60</sup>See the responses on the second data (11b, 12b, 15b, and 16b).

mit such an error. What possibly causes such an error?

In formal English we have to question:

Where did the robbery happen?  
 What does your sister look like?  
 Why did you come late last night?  
 How do you usually come here?  
 What did they talk in the staff meeting last night?

In those questions we can find the so-called to do (do, does, or did) functioning as an auxiliary verb in each question, whereas both in Indonesian and Javanese we do not own such a linguistic element. Based on the analysis, the writer predicts that this absence of this linguistic element which is found in the students' previously acquired languages becomes the main source of this type of error. The following dependent wh- interrogative clauses will justify that their previously acquired languages do interfere the students' sentence productions when they are learning dependent wh- interrogative clauses.

(13)\* ... who --- not study English last night.

(14)\* Those who --- not eat greasy food ... .

(15)\* ... why --- not call the police?

(16)\* ... why Flora --- not want to love me anymore.

Above, we can notice that to do is absent from the dependent wh- interrogative clause. The word tidak is never translated into "do not, does not, or did not". It is simply translated into "not".

To repeat, the errors spelt out above are what may be called interlanguage errors; that is, errors which are caused by the interference of the learner's mother tongue or the learner's previously mastered languages.



The source of this type of error is language transfer.

#### 4.5.7. Beverb Errors

The last type of errors that can be encountered in the respondents' responses by the writer is the so-called "beverb errors". By beverb errors are meant errors which are identified as the result of the respondents' responses which have a to be + verb - pattern in active dependent wh- interrogative clauses. The pattern itself is, by all means, grammatically unacceptable. However, a beginner or even an SMA student learning English still applies that pattern. The respondents' beverb errors can be observed through the second data<sup>61</sup>.

As can be observed in the made-test, there are eight items that can lead the respondents to commit such an error. All these eight items belong to part I (translation). Nobody committed such a pattern in part II. As we all know, they just copy the direct questions and convert them into the indirect questions. Since there are eight items in the test, the possible correct answers are, therefore,  $8 \times 168 = 1.344$ . The errors found in the respondents' responses are 118. It means that this type of error is 8.7% of the possible correct answers. This figure also implicitly reveals that there are still 8.9% of the total students in each class who all of the time

---

<sup>61</sup> See the responses on the second data (9c, 10c, 11c, 12c, 13c, 13d, 14c, 14d, 15d, 15e, 16d, and 16e.

commit such an error. Compared with the other types of errors previously discussed, this type of error has got the smallest percentage.

After analysing the responses to the eight items grouped in this phase, the errors that concern the pattern pointed out above (to be + verb in an active dependent wh- clauses) are possibly arisen by the respondents' false concepts hypothesized. Those errors might derive from faulty comprehension of distinctions in the target language. As what can be observed through the data compiled the forms was and were may be interpreted as markers of the past tense (see items 9, 11, and 15), while the forms is, am, and are may be understood to be the corresponding markers of the present tense (see items 10, 12, 13, 14, and 16).

How some students treat the auxiliary verb can is, the writer thinks, worth knowing. That is the reason why he brings forward his idea on this specific linguistic element.

As a matter of fact, some respondents still consider the auxiliary verb can as a full verb. The result of the study indicated that there are 13 respondents possessing such a wrong concept. It implicitly means that 7.7% from the total students of each class still consider the auxiliary verb can as a full verb. This type of error is not high at all compared with the previously spelt out types of errors. However, we -teachers of English- should better our teaching strategies if we are to expect

our students not to possess such a concept anymore. How to overcome this problem will be clarified in the following chapter.

#### 4.6. REJECTION OR CONFIRMATION FOR THE SECOND HYPOTHESIS

The findings which are already spelt out are regarded as adequate either to reject or to confirm the second hypothesis. Is the second hypothesis confirmed or rejected then?

Prior to coming to either rejection or confirmation for the second hypothesis, to make us more easily observe the whole findings, a table which summarizes the overall findings obtained through the second data in this study is presented to be examined<sup>62</sup>.

The table indicates that inversion errors reside in the first rank with the percentage 41.66%, while the second rank is occupied by redundancy errors with the percentage 38.09%. The lower ranks are successively filled by errors in terms of misplacement of to be, errors in terms of omission of to be, agreement errors, errors in terms of omission of to do, and beverb errors. Based on the figures listed on the table, the second hypothesis is then undoubtedly confirmed. Inversion errors are definitely proved to be the most common and striking

---

<sup>62</sup>The overall findings of the second data presented in a table in appendix VI.



errors which are committed by the students of SMA in the Special District of Yogyakarta. Furthermore, as what can be observed in the previous discussion, the possible predictable sources of this striking type of error are language transfer and overgeneralization.

----- 00000 -----

## CHAPTER V

### SUGGESTED STRATEGIES TO ELIMINATE THE ERRORS

This chapter offers a strategy that will eliminate or at least minimize the errors committed by the students of SMA when they are learning dependent wh interrogative clauses. The errors meant here are those which are already clarified elaborately in the previous chapter: chapter IV.

#### 5.1. HOW TO PREVENT THE ERRORS

It should be realized that the strategy offered in this chapter are not imperative at all, in the sense that teachers of English as a foreign language in Indonesia should implement it in the classroom practice as it is. What is the most important thing here is that teachers have to know the types of errors and what have possibly caused them.

Gorbert<sup>63</sup> says that teachers of English must plan error correction strategies carefully and that one to begin is to determine the cause of error. Furthermore, Corder and Cohen<sup>64</sup> points out if a teacher knows what has caused a given error, he can begin to search for a better teaching strategy which hopefully can prevent the students from unexpected results of learning, that is, errors. That is to say actually that knowing types of errors and their possible sources or causes is a must if a teacher wants to prevent the students from the errors defined in the previous chapter.

Since most teachers of English in Indonesia have never attempted to realize the ideas pointed out above, any correction strategies they conduct have never yielded satisfactory results of learning. This is true, because various types of errors still appear when the students produce dependent wh- interrogative clauses. Seven types of errors are encountered when the students produce dependent wh- interrogative clauses. Those errors are: inversion errors, redundancy errors, errors in terms of misplacement of to be, errors in terms of omission of to be, agreement errors, errors in terms of omission of to do ,

---

<sup>63</sup>Frances Gorbert, Error Analysis: What the Teacher Can Do - A New Perspective (Ottawa: Research Division ; Public Service Commission of Canada, 1974), p. 19.

<sup>64</sup>James Hendrickson, Error Analysis and Error Correction in Language Teaching, Occasional Papers, No.: 10 (Singapore: SEAMEO Regional Language Centre, 1981), p.p. 5 - 6.

and beverb errors. Each type of error is possibly caused by either interlingual interference (the influence of the students' mother tongue and the students' previously mastered language, in this case Indonesian), intralingual interference (the interference caused by the previously acquired components within the target language itself), or the students' carelessness or negligence.

If we carefully observe redundancy errors, errors in terms of omission of to be, agreement errors, errors in terms of omission of to do, and beverb errors, besides they are possibly caused by the sources mentioned above, they are also possibly caused by the students' unsatisfactory mastery of the requisite knowledge. By requisite knowledge is meant a kind of basic knowledge that a learner of a foreign language must possess in order that s/he can acquire the next patterns more easily<sup>65</sup>. The students still do not know how to make questions if the wh- elements function as the subjects; they do not know that to be (am, is, are, was, or were) should exist if the question does not contain a full verb; they still do not know that '-s' or '-es' endings should be added to the full verb if the subject of the sentence is a third person singular (including 'it'); they do not understand that an auxiliary (do, does, or did) is gram-

---

<sup>65</sup>Edward D. Allen & Rebecca M. Vallette, Classroom Techniques (New York: Harcourt Brace Javanovich, Inc., 1977) p. 90.

matically required in a negative sentence if the main verb of the sentence is a full verb (the auxiliary is placed before 'not'); and they still do not realize that to be is not required at all in an active sentence if the sentence has got a full verb.

In order to eliminate the students' errors, teachers should provide remedial teaching on that requisite knowledge. This requisite knowledge becomes the students' linguistic problem which must be reviewed to some extent before the dependent wh- interrogative clauses are introduced.

Reviewing on the students' linguistic problem is quite helpful, especially to those who are considered as low achievers in the classroom. If this is not carried out, those students will get more confused, and thus, the errors indicated above will be more easily committed by those students.

The other types of errors which are not the consequence of the students' poor mastery of the requisite knowledge can be prevented by good explanation. Based on the writer's teaching experience, the most striking and common errors -inversion errors- can be prevented by comparing the English word order of the topic being discussed with the Indonesian or Javanese word order of the same topic. Here, the students are faced with different things and they are expected to conclude by themselves that the two word orders in terms of their systems in ordering words are not always equal or linear. Errors in



terms of misplacement of to be can be prevented by giving the students ample explanation saying that the to be is not always placed at the end of the clause. The to be can immediately follow the wh- element if the latter functions as the subject of the dependent clause.

## 5.2. CONVERSATIONAL EXERCISES

Teaching or explaining the students' linguistic problem is, of course, a good effort, but it is not enough. The students must be mechanically given ample practice by the so-called mechanical drills<sup>66</sup>, of course, with attention on the students' linguistic problem. If those mechanical drills have been satisfactorily carried out by the students, teachers can proceed with the so-called conversational exercises. The latter is suggested here to follow up the former. As we know, mechanical drills just effectively highlight particular grammatical structures, yet they are presented as a string of single sentences, not related to each other in any unifying, relevant context. Such drills, by all means, still

---

<sup>66</sup> Since most teachers of English have been familiar with the mechanical drills, the writer does not intend to discuss them here. Those who still do not know how to handle these drills are suggested to consult these books: Robert Lado, Language Teaching (Bombay-New Delhi: Tata McGraw-Hill Publishing Co., Ltd., 1974), p.p. 90 - 103; Robert Lado and Fries, English Pattern Practice (Michigan: Ann Arbor - The University of Michigan Press, 1977); Robert Krohn, English Sentence Structure (Michigan: Ann Arbor - The University of Michigan Press, 1971); and Frank M. Grittner, Teaching Foreign Languages (New York, Evanston, and London: Harper and Row Publisher, 1969), p.p. 203 - 241.

cannot be employed to eliminate the errors. Perhaps, the mechanical drills based on the students' linguistic problems are successfully handled when the students know that they are drilling that problem. But when later they try to communicate in the target language, their attention necessarily shifts to the message, while the mechanics of the language falls back upon the habit system, and the native language takes over. It means that they commit errors again. Teachers should realize that explanation and mechanical drills still do not suffice to eliminate the errors (common errors). The students should be made engaged in conversations that show they can use the dependent wh- interrogative clauses correctly. During the conversational exercises, error corrections can be given whenever it seems appropriate. Allwright<sup>67</sup> places the burden on the teacher to be a source of information about the target language and to react to errors whenever it seems appropriate to do so. Corder<sup>68</sup> claims that when the learner's attention is drawn to his mistakes, not only is he unable to correct them, but also he may even commit another error in trying to do so. Corder believes, therefore, that the teacher's function in error correction is to provide data and examples, and where necessary to offer explanation and descriptions and more importantly,

---

<sup>67</sup>James Hendrickson, op. cit., p. 16.

<sup>68</sup>Ibid.

verification of the learner's hypothesis about the target language.

To know why the writer chooses a model of conversation to exercise the students, let us follow along Robert Lado's ideas:<sup>69</sup>

"Conversational dialogues are preferable to poetry or formal prose because conversations show a greater range of the basic constructions of the language in matter-of-fact context. Poetry uses more of the unusual constructions and the less typical variants of common constructions. Prose makes little use of questions, requests, and answers; it is characterized by longer pattern."

Furthermore, Lado also suggests that dialogues are more easily memorized compared with others<sup>70</sup>.

"Poetry uses unusual sentences and special vocabulary. Reading selections have long statements of a few, if any, questions and requests. Conversational material in a standard dialect exemplifies most naturally the questions, requests, answers, statements, and vocabulary that constitute the language. So dialogues are chosen for memorization."

---

<sup>69</sup>Robert Lado, Language Teaching (Bombay - New Delhi: Tata McGraw-Hill Publishing Co., Ltd., 1974), p.51

<sup>70</sup>Ibid. p. 62.

### 5.2.1. Three Models of Conversational Exercises

Before the three models of conversational exercises are illustrated, let us now discuss how we can introduce those kinds of exercises.

Actually there are many ways to introduce these conversational exercises. The writer does not want to dictate any particular method. Rather, he encourages teachers of English to develop strategies that are compatible with their own teaching style, the specific needs of their students, and the particular grammar and content of the lesson at hand.

Some teachers will want not to distribute the texts at this stage, giving their students a chance to listen to the model before seeing it in print. Whereas others will want to distribute the texts and to have their texts open for the model conversation or see it in written on the blackboard. The teacher may read or act out the conversation while the students follow along, or may read through the model with another student, or may have two students present the model to the class.

Whether texts distributed are open or closed, students should have ample opportunity to understand and practice the model before attempting the conversational exercises that follow it. If the students have got ample opportunity to understand and practice the given model, the teacher's key function is simply to pair up students for "side by side" conversational practice and then to serve as a resource to the class: for help with the help

with the structure, new vocabulary, and pronunciation.

Really, 'side by side' practice can take many forms. Most teachers prefer to call on two students at a time to present a conversation to the class. Other teachers have their students pair up and practice the conversations together. Or small groups of students might work together, pairing up within these groups and presenting the conversations to each other. This paired practice help teachers address the varying levels of ability of their students. Some teachers like to pair stronger students with weaker ones. The slower student clearly gains through this pairing while the more advanced student also strengthens his or her abilities by lending assistance to the speaking partner. Other teachers will want to pair up or group students of similar levels of ability. In this arrangement, the teacher can devote greater attention to the students who need it while giving more capable students the chance to learn from and assist each other. To make the explanation above more clearly understood, let us see the following exercises<sup>71</sup> that can be employed to practice the topic being discussed in this thesis.

---

<sup>71</sup>The first two models are adapted from Side By Side: English Grammar Through Guided Conversations, II.

MODEL I:

A: Where is the money?

B: I don't know where the money is.



A: What did the robbers look like?

B: I don't remember what they looked like.

ASK AND ANSWER THESE QUESTIONS USING ONE OF THE FOLLOWING EXPRESSIONS IN YOUR ANSWER:

I don't know ... .

I don't remember ... .

I can't remember ... .

I've forgotten ... .

I'm not sure ... .

I have no idea ... .



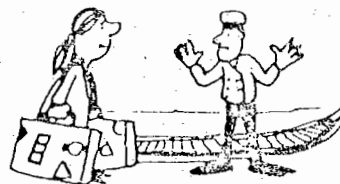
1. Where are my keys?



2. What was his license number?



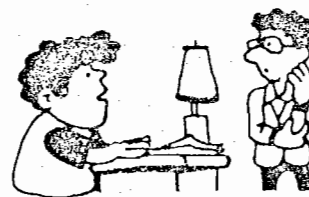
3. What are they arguing about?



4. When will the train arrive?



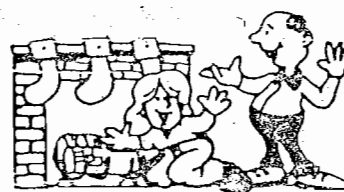
5. Who should I call?



6. Who was the president of Indonesia?



7. How long have Mr. and Mrs. Pramono been married?



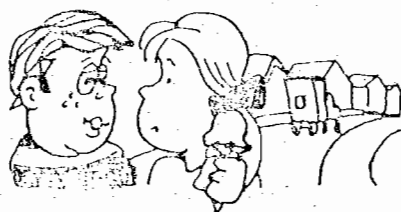
8. When is Santa Claus going to come?



9. Where did you buy your coat?



10. How much do the eggs cost this week?



11. How often does the ice cream truck come by?



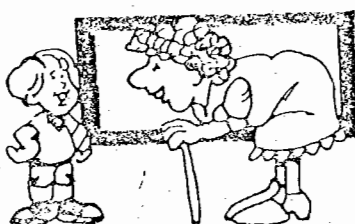
12. What time does the movie begin?



13. What did we do in English class yesterday?



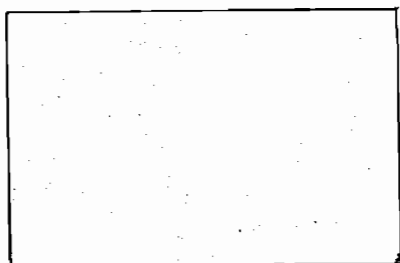
14. Why do young people like such loud music?



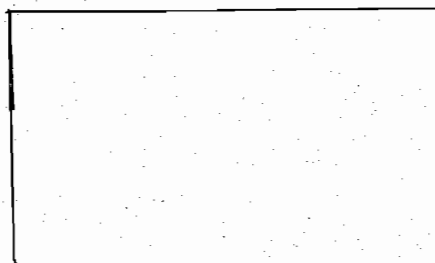
15. Who called me the day before?



16. How much does a haircut cost these days?

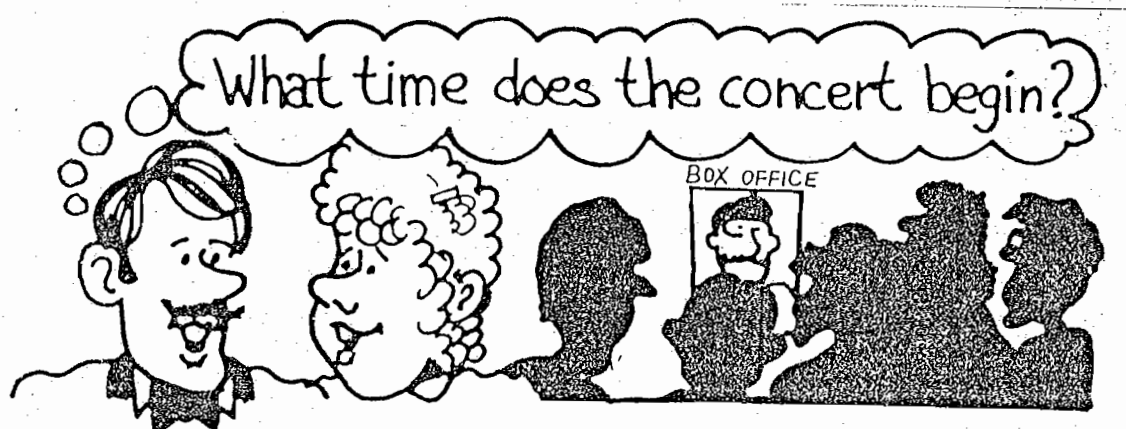


17. ....  
..... ?



18. ....  
..... ?



MODEL II:

A: Do you know what time the concert begins?

B: I'm sorry. I don't know. You should ask the man at the box office. He can tell you what time the concert begins.

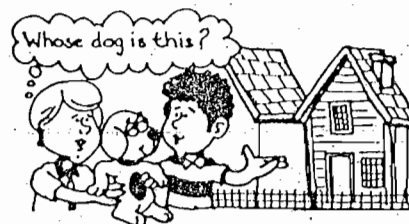


A: Can you tell me how long I've been here?

B: I'm soorry. I don't know. You should ask your nurse. She can tell you how long you've been here.



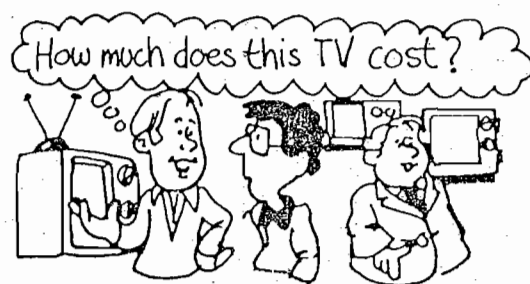
1. Do you know ...  
ask the ticket agent



2. Do you by any chance know ...  
ask the people next door



2. Could you please tell  
me ...  
ask the teacher



4. Do you by any chance know ...  
talk to the salesman



5. Can you tell me ...  
check with the mechanic



6. Do you have any idea ...  
ask his supervisor



7. Could you possibly  
tell me ....  
ask the boss



8. Could you tell me ...  
ask your older brother

MODEL III:

91

Harto (S1) : What's her name?

Anton (S2) : Pardon?

Andre (S3) : Harto wants to know what her name  
is.

Anton : Oh, sorry. I didn't understand.  
(I'm not sure. I think/Perhaps/  
Maybe) her name's Inggar.

OR:

Oh sorry. I didn't understand.

I don't know<sup>72</sup> what her name is.

After the students have ample opportunity to understand and practice the given model, the teacher can break the students into groups of three and ask them to practice the given model with new information. To make the students understand the given model, the teacher should explain how the situation of the conversation looks like. The explanation can be given in Indonesian when necessary.

In the model of conversation above, we can see that S1 asks S2 a question. S2 pretends to hard of hearing. And then S3 reports the question. S3's effort lets S2 understand the question and finally answer it. Here

---

<sup>72</sup>This expression can be replaced by any expression listed in the previous page. See model I. ex-

the students can also practice how to answer a question if they are certain or uncertain. They can also practice how to answer a question if they really do not know.

To be acknowledged, there are still other types of exercises that will also improve the students' mastery of the dependent wh- interrogative clauses other than the types of exercises offered in the preceding pages. From the types of exercises listed, a teacher, hopefully, can get a good idea of just what has to be carried out to ensure learning on the part of the students. The resourceful teachers, the writer believes, can come up with many useful and practical exercises which fit the level of both the class and individual students.

----- 00000 -----

## CHAPTER VI

### CONCLUSION

This thesis, finally, ends with the conclusion that dependent wh- interrogative clauses are to a certain extent difficult for students of SMA. This is true because only 28% of the sample obtains scores above 75 on a 0 - 100 scale. The remainings, 72% of the sample, do experience difficulty in learning the dependent wh-interrogative clauses.

Students of SMA commit various types of errors when they produce complex sentences in which the dependent wh- interrogative clauses exist. The result of the analysis points out seven different types of errors, i.e.: inversion errors, redundancy errors, errors in terms of misplacement of to be, errors in terms of omission of to be, agreement errors, errors in terms of omission of to do, and beverb errors. Further study confirms that the most common and striking errors among others are the so-called inversion errors. Basically there are three possible sources which quite possibly cause those

errors to occur, namely: interlingual interference, that is the influence of the students' mother tongue and the students' previously mastered language, intralingual interference, that is the interference caused by: over-generalization and false concepts hypothesized, and the third source is the students' carelessness or negligence. The findings above, inevitably reveals that the teaching item discussed in this study demands extra attention in the learning-teaching process if teachers of English expect better results of learning.

Since the result of the study proves that dependent wh- interrogative clauses are difficult to acquire, some thoughts on how to eliminate or at least to minimize the errors which are most of the time committed by the students are offered. The exercises illustrated in chapter V aim to help students learn to use the language grammatically, through practice with meaningful conversational exchanges.

It is on account of his limited knowledge on both the topic being discussed and the research methodology that the writer confesses that the whole findings obtained through his study are still far from being satisfactory. Anyhow, the writer believes that his present findings are of good contributions to the improvement of teaching English especially teaching dependent wh- interrogative clauses to students of Senior High School.

It is also due to the reason above that the

writer in this occasion welcomes any researchers who are interested in this field to conduct further studies on the same topic with the hope that the coming studies will be more completely, accurately and perfectly done. If so, the writer believes, more complete, accurate, and perfect findings can hopefully be obtained.

----- 00000 -----

## BIBLIOGRAPHY

- Allen, Edward D., and Rebecca M. Vallette, Classroom Techniques (New York: Harcourt Brace Javanovich, Inc., 1977).
- Alter, J.B., Curriculum English SMA for Indonesia - Book 2 (Hongkong: Times Educational Co. Ltd., 1980).
- Ary, Donald, Introduction to Research in Education (New York: Holt, Rinehart, and Winston Inc., 1973).
- Brumfit, Christopher J., Problems and Principles in English Teaching (Oxford: Pergamon Press, 1980).
- Departemen P & K, Structure Reference II & III (Bandung : Star Offset, 1972).
- Departemen P & K, Garis-Garis Besar Program Pengajaran - Buku IID2 (Jakarta: PN Balai Pustaka, 1981).
- Departemen P & K, Pedoman Pelaksanaan Kurikulum - Buku IIIB (Jakarta: PN Balai Pustaka, 1981).
- Gobert, Frances, Error Analysis: What the Teacher Can Do - A New Perspective (Ottawa: Research Division, 1974).
- Gorrell, Robert M., and Charlton Laird, Modern English Handbook (Englewood, N.J.: Prentice-Hall Inc., 19??).
- Grittner, Frank M., Teaching Foreign Languages (New York: Harper and Row Publisher, 1969).
- Hadi, Sutrisno, Metodologi Research 1 (Yogyakarta: Uni - versitas Gajah Mada Press, 1978).
- Hadi, Sutrisno, Metodologi Research 2 (Yogyakarta: Uni - versitas Gajah Mada Press, 1979).
- Hadi, Sutrisno, Bimbingan Menulis Skripsi Thesis I (Yogyakarta: Yayasan Penerbitan Fakultas Psikologi UGM, 1983).
- Hadi, Sutrisno, Bimbingan Menulis Skripsi Thesis II (Yogyakarta: Yayasan Penerbitan Fakultas Psikologi UGM, 1983).
- Harris, David P., Testing English as a Second Language (New York: McGraw-Hill, 1969).
- Heaton, J.B., Writing English Test (London: Longman Group Ltd., 1975).



- Hendrickson, James, Error Analysis and Error Correction in Language Teaching, Occasional Papers, No: 10 (Singapore: SEAMEO Regional Language Centre, 1981)
- Hornby, A.S., The Teaching of Structural Words and Sentence Pattern, Stages Three and Four (London: Oxford University Press, 1972).
- Hornby, A.S., Oxford Advanced Learner's Dictionary of Current English, Third Ed. (London: ELBS& Oxford University Press, 1974).
- Jain, M.P., "Error Analysis: Source, Cause, and Significance," Error Analysis, Ed. by Jack C. Richards (London: Longman Group Ltd., 1974)
- Kanwil Departemen P & K D.I.Y., Daftar Sekolah-Sekolah di Lingkungan Kanwil Dep. P & K D.I.Y. (Yogyakarta: ----, 1984).
- Krohn, Robert, English Sentence Structure, Tenth Ed. (Michigan: Ann Arbor - The University of Michigan, 1977).
- Lado, Robert, and Charles C. Fries, English Sentence Pattern, Fifth Ed. (Michigan: Ann Arbor - The University of Michigan Press, 1960).
- Lado, Robert, Language Testing (London: Longman Group Ltd., 1961).
- Lado, Robert, Language Teaching - A Scientific Approach (Bombay-New Delhi: Tata McGraw-Hill Publishing Co. Ltd., 1974)
- Leech, Geoffrey, and Jan Svartvik, A Communicative Grammar of English (London: Longman Group Ltd., 1983)
- Melvin, Keene, "Introducing Your Subjects," Beginning Secondary School Teacher's Guide (New York: Harper & Row Publishers, 1969).
- Molinsky, Steven J., Side By Side: English Grammar Through Guided Conversations - Book 2 (Englewood: Prentice-Hall Inc., 1981).
- Nasution, S., and M. Thomas, Buku Penuntun Membuat Tesis, Disertasi, Skripsi, Report, dan Paper (Bandung: C.V. Jemmars, 1980).
- Paulston, Christina Bratt, and Mary Newton Bruder, Teaching English as a Second Language: Techniques and Procedures (Cambridge, Massachusetts: Winthrop Publishers Inc., 1976).

Poedjosoedarmo, Soepomo, Interferensi Gramatikal Bahasa Jawa Dalam Pemahaman Bahasa Indonesia Murid Sekolah Dasar, Balai Penelitian Bahasa Dep. P & K (Maret, 1978).

Quirk, Randolph, et al., A Grammar of Contemporary English, Ninth Ed. (London: Longman Group Ltd., 1980).

Quirk, Randolph, and Sidney Greenbaum, A University Grammar of English, Fifth Ed. (Hongkong: Longman Group Ltd., 1981).

Richards, Jack C., and Gloria P. Sampson, "The Study of Learner's English," Error Analysis, Ed. by Jack C. Richards (London: Longman Group Ltd., 1974).

Richards, Jack C., "A Non-Contrastive Approach to Error Analysis," Error Analysis, Ed. by Jack C. Richards (London: Longman Group Ltd., 1974).

Surachmad, Winarno, Dasar dan Teknik Research (Bandung : C.V. Transito, 1970).

Watkins, George, "Language Teaching," The Teaching of English in Secondary Schools, Ed. by Assistant Masters Association, Forth Ed. (London: Cambridge University Press, 1973).

Weinreich, Uriel, Languages In Contact, Seventh Ed. (Paris: The Hague, 1970).

----- 00000 -----

# LAMPIRAN

APPENDICES:

(I - VI)

APPENDIX I:

I. TERJEMAHKANLAH BAGIAN-BAGIAN YANG BERGARIS BAWAH KE DALAM BAHSA INGGRIS YANG BAIK. DAFTAR KATA-KATA SUKAR DAN 'TENSES' YANG HARUS DIPAKAI TERSEDIA DI LEMBAR TERAKHIR.  
NOMOR SOAL: 1 - 16.



1. Pak guru ingin tahu siapa yang sakit kemarin.
2. Mereka tidak tahu siapa yang ada di dalam sekarang.
3. Maaf, Pak. Saya tidak dapat menerka berapa usia Big Ben sebenarnya.
4. Dapatkah anda memberitahu saya dimana orang tua anda sekarang?
5. Apakah anda tahu siapa yang sedang menyanyi di ruang sebelah?
6. Mereka tidak mengatakan kepada saya siapa yang harus membersihkan piring-piring itu semua.
7. Saya kira dia bisa memberitahu anda dimana anda bisa memangkas rambut anda.
8. Dapatkah anda memberitahu saya apakah yang harus saya lakukan seandainya saya kehilangan sesuatu yang berharga?
9. Anda dapat langsung bertanya kepadanya siapa yang mengajarnya inggris.
10. Saya tidak mempunyai pendapat apakah yang membuat anak-anak muda menyukai musik keras.
11. Pertanyaannya adalah siapa yang tidak belajar Inggris tadi malam.

24. A: How long have your parents been married?

B: Sorry, Sir. I'm not sure .....

25. A: Who wants to go for a walk?

B: I'll ask him .....

26. A: What makes people fat?

B: Nobody has told me .....

27. A: Who didn't attend the meeting?

B: Sorry, Madam. I can't remember .....

28. A: Who doesn't like to participate in the seminar?

B: You'd better ask the captain of the class .....

29. A: When did they get engaged?

B: I'm not sure .....

30. A: When did the First World War begin?

B: I can't remember .....

31. A: Why doesn't she like to get married soon?

B: I really don't know. You'd better ask her directly .....

32. A: What kind of food doesn't she like?

B: I can't remember .....

~~~~~GOOD LUCK~~~~~

DAFTAR KATA-KATA SUKAR:

- di dalam : inside
- sebenarnya : actually
- di ruang sebelah : next door
- membersihkan : clean
- piring-piring : dishes
- memangkas rambut anda : get you hair cut
- kehilangan sesuatu yang berharga : lose anything valuable
- anak-anak muda : youngsters
- musik keras : loud music
- makanan yang berlemak : greasy food
- perpustakaan : library
- memanggil : call
- lagi : anymore

"TENSES" YANG HARUS DIPAKAI:

| SOAL NOMOR | "TENSES"           |
|------------|--------------------|
| 1          | past               |
| 2          | present            |
| 3          | present            |
| 4          | present            |
| 5          | present continuous |
| 6          | present            |
| 7          | present            |
| 8          | present            |
| 9          | past               |
| 10         | present            |
| 11         | past               |
| 12         | present            |
| 13         | present            |
| 14         | present            |
| 15         | past               |
| 16         | present            |

NAMA LENGKAP: .....

KELAS/JRS. : .....

.....

NAMA SEKOLAH: .....

LEMBAR JAWABAN:

1. The teacher wants to know who .....
2. They don't know who .....
3. Sorry, Sir. I can't guess how old .....
4. Can you tell me where .....
5. Do you know who .....
6. They didn't tell me who .....
7. I think he can tell you where .....
8. Can you tell me what .....
9. You can directly ask her who .....
10. I have no idea what .....
11. His question is who .....
12. I don't know who .....
13. I don't know how often .....
14. Please ask her when .....
15. Can you tell me why .....
16. Try to tell me frankly why .....
17. Sorry, Sir. I have no idea .....
18. Sorry, Madam. I can't tell you .....
19. To tell you the truth, I really don't know .....
20. I have no idea .....
21. I have no idea .....
22. Please ask the teacher .....



- 23. I've forgotten .....
- 24. Sorry, Sir. I'm not sure .....
- 25. I'll ask him .....
- 26. Nobody has told me .....
- 27. Sorry, Madam. I can't remember .....
- 28. You'd better ask the captain of the class .....
- 29. I'm not sure .....
- 30. I can't remember .....
- 31. I really don't know. You'd better ask her directly  
.....
- 32. I can't remember .....

----- 00000 -----

APPENDIX II:

THE DISTRIBUTION OF HIGHS, AVERAGES, AND LOWS

NAME OF SCHOOL : SMA NEGERI 1 YOGYAKARTA  
DEPARTMENT : SOCIAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 8      | 23       | 7      |
| 2        | 8      | 24       | 7      |
| 3        | 8      | 25       | 7      |
| 4        | 8      | 26       | 7      |
| 5        | 8      | 27       | 7      |
| 6        | 8      | 28       | 6      |
| 7        | 7      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 6      |
| 15       | 7      | 37       | 6      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 4      |
| 22       | 7      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
6 : 31 : 7.

NAME OF SCHOOL : SMA STELLA DUCE YOGYAKARTA  
DEPARTMENT : PHYSICAL SCIENCES  
 TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 9      | 23       | 7      |
| 2        | 9      | 24       | 7      |
| 3        | 9      | 25       | 7      |
| 4        | 8      | 26       | 7      |
| 5        | 8      | 27       | 7      |
| 6        | 8      | 28       | 7      |
| 7        | 8      | 29       | 7      |
| 8        | 8      | 30       | 7      |
| 9        | 7      | 31       | 7      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 6      |
| 15       | 7      | 37       | 6      |
| 16       | 7      | 38       | 6      |
| 17       | 7      | 39       | 6      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 5      |
| 22       | 7      | 44       | 5      |

The distribution of highs, averages, and lows is  
 8 : 31 : 5.

NAME OF SCHOOL : SMA NUSANTARA YOGYAKARTA  
DEPARTMENT : PHYSICAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 8      | 23       | 6      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 7      | 28       | 6      |
| 7        | 7      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 4      |
| 22       | 6      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
 5 : 30 : 9.

NAME OF SCHOOL : SMA MA'ARIF YOGYAKARTA  
DEPARTMENT : PHYSICAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 8      | 23       | 6      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 7      | 28       | 6      |
| 7        | 7      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 6      | 42       | 4      |
| 21       | 6      | 43       | 4      |
| 22       | 6      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
 5 : 30 : 9.

NAME OF SCHOOL : SMA NEGERI 1 BANTUL  
DEPARTMENT : SOCIAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 9      | 23       | 6      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 8      | 28       | 6      |
| 7        | 8      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 5      |
| 22       | 7      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
 7 : 28 : 9.

NAME OF SCHOOL : SMA BOPKRI BANTUL  
DEPARTMENT : SOCIAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 9      | 23       | 7      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 8      | 28       | 6      |
| 7        | 8      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 5      |
| 22       | 7      | 44       | 5      |

\*The distribution of highs, averages, and lows is  
7 : 28 : 9.



NAME OF SCHOOL : SMA NEGERI 1 WATES  
DEPARTMENT : PHYSICAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 9      | 23       | 6      |
| 2        | 9      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 8      | 28       | 6      |
| 7        | 8      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 6      | 43       | 4      |
| 22       | 6      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
 7 : 28 : 9.

NAME OF SCHOOL : SMA BOPKRI WATES  
DEPARTMENT : PHYSICAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 8      | 23       | 7      |
| 2        | 8      | 24       | 7      |
| 3        | 8      | 25       | 7      |
| 4        | 8      | 26       | 7      |
| 5        | 8      | 27       | 7      |
| 6        | 8      | 28       | 6      |
| 7        | 8      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 4      |
| 22       | 7      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
 7 : 28 : 9.

NAME OF SCHOOL : SMA NEGERI 1 WONOSARI  
DEPARTMENT : SOCIAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 9      | 23       | 6      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 8      | 28       | 6      |
| 7        | 7      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 6      |
| 15       | 7      | 37       | 6      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 5      |
| 22       | 7      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
 6 : 31 : 7.

NAME OF SCHOOL : SMA MUHAMADIYAH WONOSARI  
DEPARTMENT : SOCIAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 8      | 23       | 6      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 7      | 28       | 6      |
| 7        | 7      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 6      | 42       | 5      |
| 21       | 6      | 43       | 5      |
| 22       | 6      | 44       | 5      |

\*The distribution of highs, averages, and lows is  
 5 : 30 : 9.

NAME OF SCHOOL : SMA NEGERI 1 SLEMAN  
DEPARTMENT : PHYSICAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 9      | 23       | 7      |
| 2        | 9      | 24       | 7      |
| 3        | 8      | 25       | 7      |
| 4        | 8      | 26       | 7      |
| 5        | 8      | 27       | 7      |
| 6        | 8      | 28       | 7      |
| 7        | 8      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 4      |
| 22       | 7      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
 7 : 28 : 9.

NAME OF SCHOOL : SMA COLLESE DE BRITO  
DEPARTMENT : PHYSICAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 9      | 23       | 7      |
| 2        | 9      | 24       | 7      |
| 3        | 9      | 25       | 7      |
| 4        | 8      | 26       | 7      |
| 5        | 8      | 27       | 7      |
| 6        | 8      | 28       | 7      |
| 7        | 8      | 29       | 7      |
| 8        | 7      | 30       | 7      |
| 9        | 7      | 31       | 7      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 6      |
| 15       | 7      | 37       | 6      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 5      |
| 21       | 7      | 43       | 5      |
| 22       | 7      | 44       | 5      |

\*The distribution of highs, averages, and lows is  
 7 : 30 : 7.

NAME OF SCHOOL : SMA ST. THOMAS SLEMAN  
DEPARTMENT : SOCIAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 8      | 23       | 6      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 8      | 28       | 6      |
| 7        | 8      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 5      |
| 20       | 7      | 42       | 4      |
| 21       | 6      | 43       | 4      |
| 22       | 6      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
7 : 28 : 9.

NAME OF SCHOOL : SMA ST. AGUSTINUS SLEMAN  
DEPARTMENT : PHYSICAL SCIENCES  
TOTAL OF STUDENTS : 44

| SUBJECTS | SCORES | SUBJECTS | SCORES |
|----------|--------|----------|--------|
| 1        | 8      | 23       | 6      |
| 2        | 8      | 24       | 6      |
| 3        | 8      | 25       | 6      |
| 4        | 8      | 26       | 6      |
| 5        | 8      | 27       | 6      |
| 6        | 8      | 28       | 6      |
| 7        | 8      | 29       | 6      |
| 8        | 7      | 30       | 6      |
| 9        | 7      | 31       | 6      |
| 10       | 7      | 32       | 6      |
| 11       | 7      | 33       | 6      |
| 12       | 7      | 34       | 6      |
| 13       | 7      | 35       | 6      |
| 14       | 7      | 36       | 5      |
| 15       | 7      | 37       | 5      |
| 16       | 7      | 38       | 5      |
| 17       | 7      | 39       | 5      |
| 18       | 7      | 40       | 5      |
| 19       | 7      | 41       | 4      |
| 20       | 7      | 42       | 4      |
| 21       | 6      | 43       | 4      |
| 22       | 6      | 44       | 4      |

\*The distribution of highs, averages, and lows is  
7 : 28 : 9.



APPENDIX III:

## THE TABULATION OF THE SCORES OF THE TEST TRY-OUT

| TESTEES | SCORES | TESTEES | SCORES |
|---------|--------|---------|--------|
| 1       | 26     | 21      | 23     |
| 2       | 26     | 22      | 23     |
| 3       | 26     | 23      | 23     |
| 4       | 26     | 24      | 23     |
| 5       | 26     | 25      | 22     |
| 6       | 25     | 26      | 22     |
| 7       | 25     | 27      | 22     |
| 8       | 25     | 28      | 21     |
| 9       | 24     | 29      | 21     |
| 10      | 24     | 30      | 21     |
| 11      | 24     | 31      | 20     |
| 12      | 24     | 32      | 18     |
| 13      | 23     | 33      | 18     |
| 14      | 23     | 34      | 18     |
| 15      | 23     | 35      | 18     |
| 16      | 23     | 36      | 15     |
| 17      | 23     | 37      | 15     |
| 18      | 23     | 38      | 15     |
| 19      | 23     | 39      | 13     |
| 20      | 23     | 40      | 10     |

|                           |   |       |
|---------------------------|---|-------|
| The Total Score           | = | 867   |
| The Number of the Testees | = | 40    |
| The Average Score         | = | 21.67 |

It reveals that on the average the testees can correctly answer 21.67 items out of the 32 items administered or 67.73% of the whole test.

———— 0000 ————

TABLE IV:

123

THE SPLIT-HALF METHOD OF COMPUTING THE RELIABILITY OF THE TRY-OUT.

| N  | X  | Y  | XY  | X <sup>2</sup> | Y <sup>2</sup> |
|----|----|----|-----|----------------|----------------|
| 1  | 12 | 14 | 168 | 144            | 196            |
| 2  | 12 | 14 | 168 | 144            | 196            |
| 3  | 12 | 14 | 168 | 144            | 196            |
| 4  | 12 | 14 | 168 | 144            | 196            |
| 5  | 12 | 14 | 168 | 144            | 196            |
| 6  | 11 | 14 | 154 | 121            | 196            |
| 7  | 11 | 14 | 154 | 121            | 196            |
| 8  | 11 | 14 | 154 | 121            | 196            |
| 9  | 11 | 13 | 143 | 121            | 169            |
| 10 | 11 | 13 | 143 | 121            | 169            |
| 11 | 10 | 14 | 140 | 100            | 196            |
| 12 | 10 | 14 | 140 | 100            | 196            |
| 13 | 10 | 13 | 130 | 100            | 169            |
| 14 | 10 | 13 | 130 | 100            | 169            |
| 15 | 10 | 13 | 130 | 100            | 169            |
| 16 | 10 | 13 | 130 | 100            | 169            |
| 17 | 10 | 13 | 130 | 100            | 169            |
| 18 | 10 | 13 | 130 | 100            | 169            |
| 19 | 10 | 13 | 130 | 100            | 169            |
| 20 | 10 | 13 | 130 | 100            | 169            |
| 21 | 11 | 12 | 132 | 121            | 144            |
| 22 | 11 | 12 | 132 | 121            | 144            |
| 23 | 11 | 12 | 132 | 121            | 144            |
| 24 | 11 | 12 | 132 | 121            | 144            |
| 25 | 9  | 13 | 117 | 81             | 169            |
| 26 | 9  | 13 | 117 | 81             | 169            |
| 27 | 9  | 13 | 117 | 81             | 169            |
| 28 | 8  | 13 | 104 | 64             | 169            |
| 29 | 8  | 13 | 104 | 64             | 169            |
| 30 | 8  | 13 | 104 | 64             | 169            |

p.t.o.

|    |   |    |    |    |     |
|----|---|----|----|----|-----|
| 31 | 8 | 12 | 96 | 64 | 144 |
| 32 | 7 | 11 | 77 | 49 | 121 |
| 33 | 7 | 11 | 77 | 49 | 121 |
| 34 | 7 | 11 | 77 | 49 | 121 |
| 35 | 7 | 11 | 77 | 49 | 121 |
| 36 | 5 | 10 | 50 | 25 | 100 |
| 37 | 5 | 10 | 50 | 25 | 100 |
| 38 | 5 | 10 | 50 | 25 | 100 |
| 39 | 4 | 9  | 36 | 16 | 81  |
| 40 | 3 | 7  | 21 | 9  | 49  |

---



---

|    |     |     |      |      |      |
|----|-----|-----|------|------|------|
| 40 | 369 | 498 | 4710 | 3604 | 6298 |
|----|-----|-----|------|------|------|

---



---

$$\begin{aligned}
 r_{xy}^2 &= \frac{[N \cdot \sum xy - (\sum x)(\sum y)]^2}{[N \cdot \sum x^2 - (\sum x)^2][N \cdot \sum y^2 - (\sum y)^2]} \\
 &= \frac{[(40 \cdot 4710) - (368 \cdot 496)]^2}{[(40 \cdot 3604) - (135424)][(40 \cdot 6298) - (248004)]} \\
 &= \frac{(188400 - 183264)^2}{(144160 - 135424)(251920 - 248004)} \\
 &= \frac{26,378,496}{34,210,176} \\
 &= 0.771071625 \\
 r_{xy} &= \sqrt{0.771071625} \\
 &= 0.8781068414 \\
 &= .87
 \end{aligned}$$



where:

- N = the number of the testees
- x = the scores of the odd items
- y = the scores of the even items
- $x^2$  = the square of the scores of the odd items
- $y^2$  = the square of the scores of the even items
- $r_{xy}$  = the coefficient of reliability of the half test
- $\sum$  = sum up sign

THE COMPUTATION OF THE COEFFICIENT OF RELIABILITY OF THE ENTIRE TEST.

$$r_{11} = \frac{2 \times r_{\frac{11}{22}}}{1 + r_{\frac{11}{22}}}$$

$$\frac{2 \times .87}{1 + .87}$$

$$\frac{1.74}{1.87}$$

$$.93$$

where:  $r_{11}$  = the coefficient of reliability of the entire test  
 $r_{\frac{11}{22}}$  = the coefficient of reliability of the half test.

\_\_\_\_\_ 000000 \_\_\_\_\_

THE COMPUTATION OF THE VALIDITY OF THE TEST TRY-OUT USING THE  
PEARSON'S PRODUCT MOMENT CORRELATION FORMULA

| N  | x  | y  | $x^2$ | $y^2$ | xy   |
|----|----|----|-------|-------|------|
| 1  | 81 | 80 | 6561  | 6400  | 6480 |
| 2  | 81 | 80 | 6561  | 6400  | 6480 |
| 3  | 81 | 80 | 6561  | 6400  | 6480 |
| 4  | 81 | 85 | 6561  | 7225  | 6885 |
| 5  | 81 | 85 | 6561  | 7225  | 6885 |
| 6  | 78 | 75 | 6084  | 5625  | 5850 |
| 7  | 78 | 75 | 6084  | 5625  | 5850 |
| 8  | 78 | 75 | 6084  | 5625  | 5850 |
| 9  | 75 | 70 | 5625  | 4900  | 5250 |
| 10 | 75 | 70 | 5625  | 4900  | 5250 |
| 11 | 75 | 70 | 5625  | 4900  | 5250 |
| 12 | 75 | 70 | 5625  | 4900  | 5250 |
| 13 | 71 | 80 | 5041  | 6400  | 5680 |
| 14 | 71 | 80 | 5041  | 6400  | 5680 |
| 15 | 71 | 80 | 5041  | 6400  | 5680 |
| 16 | 71 | 75 | 5041  | 5625  | 5325 |
| 17 | 71 | 75 | 5041  | 5625  | 5325 |
| 18 | 71 | 75 | 5041  | 5625  | 5325 |
| 19 | 71 | 60 | 5041  | 3600  | 4260 |
| 20 | 71 | 60 | 5041  | 3600  | 4260 |
| 21 | 71 | 60 | 5041  | 3600  | 4260 |
| 22 | 71 | 60 | 5041  | 3600  | 4260 |

|    |    |    |      |      |      |
|----|----|----|------|------|------|
| 23 | 71 | 60 | 5041 | 3600 | 4260 |
| 24 | 71 | 60 | 5041 | 3600 | 4260 |
| 25 | 68 | 50 | 4624 | 2500 | 3400 |
| 26 | 68 | 50 | 4624 | 2500 | 3400 |
| 27 | 68 | 50 | 4624 | 2500 | 3400 |
| 28 | 65 | 75 | 4225 | 5625 | 4875 |
| 29 | 65 | 75 | 4225 | 5625 | 4875 |
| 30 | 65 | 50 | 4225 | 2500 | 3250 |
| 31 | 62 | 50 | 3844 | 2500 | 3100 |
| 32 | 56 | 50 | 3136 | 2500 | 2800 |
| 33 | 56 | 50 | 3136 | 2500 | 2800 |
| 34 | 56 | 50 | 3136 | 2500 | 2800 |
| 35 | 56 | 65 | 3136 | 4225 | 3640 |
| 36 | 46 | 60 | 2116 | 3600 | 2760 |
| 37 | 46 | 60 | 2116 | 3600 | 2760 |
| 38 | 46 | 60 | 2116 | 3600 | 2760 |
| 39 | 40 | 50 | 1600 | 2500 | 2000 |
| 40 | 31 | 50 | 961  | 2500 | 1550 |

---

|    |      |      |        |        |        |
|----|------|------|--------|--------|--------|
| 40 | 2585 | 2615 | 185893 | 179075 | 180505 |
|----|------|------|--------|--------|--------|

---



$$\begin{aligned}
 r_{xy} &= \frac{\sum xy - \frac{\sum x \sum y}{N}}{\sqrt{\left[ \sum x^2 - \frac{(\sum x)^2}{N} \right] \left[ \sum y^2 - \frac{(\sum y)^2}{N} \right]}} \\
 &= \frac{180505 - 168994}{\sqrt{(185893 - 167055)(179075 - 170955)}} \\
 &= \frac{11511}{12367} \\
 &= .93
 \end{aligned}$$

where:     $N$         = the number of the testees  
                $x$         = the scores of the test try-out  
                $y$         = the final English scores  
                $r_{xy}$       = the coefficient of correlation between  
                                $x$  and  $y$   
                $\sum$         = sum up sign

-----0000000-----



1740

APPENDIX VI:

THE OVERALL FINDINGS  
OF THE SECOND DATA

| NO: | TYPES OF ERRORS       | TOTAL ERRORS |    |    |    |   |   |    |    |    |    |    |    |    |    |    | PER ITEM |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    | TOTAL ERRORS<br>OF EACH TYPE | POSSIBLE COR-<br>RECT ANSWERS | PERCENTAGE<br>OF EACH<br>TYPE |        |
|-----|-----------------------|--------------|----|----|----|---|---|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|----|------------------------------|-------------------------------|-------------------------------|--------|
|     |                       | 1            | 2  | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16       | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29  | 30  | 31 |                              |                               |                               | 32     |
| 1.  | INVERSION ERRORS      |              |    | 31 | 31 |   |   | 45 | 45 |    |    |    |    | 98 | 98 | 62 | 62       |    |    | 59 | 59 |    |    | 20 | 36 |    |    |    |    | 120 | 120 | 92 | 92                           | 1,120                         | 2,688                         | 41.66% |
| 2.  | REDUNDANCY ERRORS     |              |    |    |    |   |   |    |    | 64 | 64 |    |    |    |    |    |          |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |                              | 128                           | 336                           | 38.09% |
| 3.  | MISPLACEMENT OF TO BE | 33           | 33 |    |    | 4 |   |    |    |    |    |    |    |    |    |    |          | 67 | 67 |    |    |    | 16 |    |    |    |    |    |    |     |     |    | 220                          | 1,008                         | 21.82%                        |        |
| 4.  | OMISSION OF TO BE     | 45           | 45 |    | 28 | 9 |   |    |    |    |    |    |    |    |    |    |          |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |                              | 155                           | 840                           | 18.45% |
| 5.  | AGREEMENT ERRORS      |              |    |    |    |   |   |    |    |    |    |    |    | 23 | 23 |    |          |    |    |    |    |    |    |    |    |    |    |    |    | 16  | 16  |    |                              | 78                            | 672                           | 11.60% |
| 6.  | OMISSION OF TO DO     |              |    |    |    |   |   |    |    |    |    | 10 | 10 |    |    | 20 | 20       |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |                              | 60                            | 672                           | 8.92%  |
| 7.  | BEVERB ERRORS         |              |    |    |    |   |   |    |    | 15 | 15 | 6  | 6  | 20 | 20 | 18 | 18       |    |    |    |    |    |    |    |    |    |    |    |    |     |     |    |                              | 118                           | 1,344                         | 8.77%  |