Chapter 4

Data Analysis And Discussion

Introduction

This chapter analyses and interprets the data which have been collected for the study. The analysis were carried out with the view to examine the effectiveness of using modules a self-instructional materials on writing letters of invitation among secretarial students.

In effect, three research questions were posed, namely:

i) Whether the secretarial students will be able to write appropriate letters of invitation at the end of the module?

ii) What problems did the secretarial students encounter while using the module?

iii) What suggestions were made by the secretarial students to improve the module?

The results of data are presented and discussed in relation to the three research questions in twin. The background of the sample is also discussed in the beginning of the chapter.

Background of Sample

The researcher has used twenty secretarial students as sample for this study. All the students in the sample are pursuing their studies full time at the diploma level. The students' personal particulars are summarised in Table 1.1.

Table 1.1 : Students' Profile

	Students' Profile			
Student	Age	Year of SPM	Grade for English	Working Experience
A	18	1997	P8	-
B	18	1997	P7	sales assistant
C	19	1996	C6	-
D	18	1997	P8	-
E	18	1997	P8	-
F	19	1996	F9	-
G	20	1995	C6	typist
H	19	1996	P8	-
I	18	1997	P7	-
J	18	1997	P7	-
K	19	1996	P8	-
L	21	1994	P8	florist
M	18	1997	9	-
N	18	1997	P8	-
O	18	1997	P8	-
P	19	1996	P8	-
Q	21	1994	P7	-
R	18	1997	F9	-
S	18	1997	P7	-
T	18	1997	P7	-

The sample is between 18-21 years of age. Most of the students sat for their SPM (Sijil Pelajaran Malaysia) examination in 1997 whereas some of them sat in 1994, 1995 and 1996. Most of the students have poor performance in their English Language paper at the SPM level. Only two out of the twenty students managed to obtain a credit for their English Language paper. Three of the students had some working experience before enrolling for the secretarial course.

1. Whether the secretarial students will be able to write appropriate letters of invitation at the end of the module?

The effectiveness of the module is determined by the researcher by comparing the students' achievement in the pre-test and the post-test as well as the final assignment. The students' performance in the pre-test is summarised as below:-

Table 1.2 : Students' Performance In Pre-Test

Students' Performance	Number of Students
Good	0 0%
Average	6 30%
Poor	14 70%
Total	20 100%

<u>Scores Schedule</u>

Above 42	-	Good
21 - 41	-	Average
0 - 20	-	Poor

According to Table 1.2, 70% of the secretarial students performed badly in their pre-test compared to 30% of the students who said that their performance was average. None of the students performed well in the pre-test given to them in the module. This shows that most of the secretarial students do not know how to write a letter of invitation correctly.

Table 1.3 : Students' Total Score In Pre-Test

	Total Score	
Student	Marks (Full marks 50)	%
A	20	40
B	11	22
C	8	16
D	4	8
E	10	20
F	9	18
G	21	42
H	24	48
I	24	48
J	14	28
K	6	12
L	9	18
M	8	16
N	6	12
O	22	44
P	17	34
Q	21	42
R	25	50
S	7	14
T	3	6

From Table 1.3, the highest score was obtained by student R in the pre-test with 25 marks (50%) compared to the lowest score, 3 marks (6%) which was obtained by student T. Most of the total scores obtained by the students are at the range of 0 – 20 marks. Generally, students' achievement in the pre-test is low.

The researcher has also summarised the results of the students' achievement in the post-test. This can be seen in the following table.

Table 1.4 : Students' Performance In Post-Test

Students' Performance	Number of Students
Good	2 (10%)
Average	12 (60%)
Poor	6 (30%)
Total	20 100%

Scores Schedule

Above 42 - Good

21 - 41 - Average

0 - 20 - Poor

Table 1.4 shows that 60% of the secretarial students have scored average marks compared to 30% of the students who performed badly in the post-test. However, 10% of the secretarial students managed to obtain good marks in the post-test.

Table 1.5 : Students' Total Score In Post-Test

	Total Score	
Student	Marks (Full marks 50)	%
A	25	50
B	27	54
C	9	18
D	7	14
E	20	40
F	21	42
G	30	60
H	42	84
I	40	80
J	20	40
K	21	42
L	23	46
M	19	38
N	28	56
O	26	52
P	32	64
Q	35	70
R	42	84
S	21	42
T	15	30

In Table 1.5, the highest score obtained is 42 marks (84%) and were obtained by student H and student R. The lowest score is 7 marks (14%) and was obtained by student O. Most of the students obtained scores at the range of 21 - 41 marks.

Comparison Of Students Performance In The Pre-Test And Post-Test

The effectiveness of the module was determined by comparing the students' performance in the pre-test and the post-test.

Table 1.6 : Comparison of Students' Performance In The Pre-Test And Post-Test

	Number of Students	
Students' Performance	Pre-Test	Post-Test
Good	0 (0%)	2 10%
Average	6 (30%)	12 60%
Poor	14 (70%)	6 30%
Total	20 (100%)	20 100%

From Table 1.6, it is obvious that students performed better in the post-test compared to the pre-test. In the pre-test no students performed well compared to the post-test whereby 10% of the students managed to perform well in the post-test. Their performance in writing letters have improved in the post-test.

30% of the students scored average marks in the pre-test compared to 60% of students who scored average marks in the post-test. There is an increase of the number of students who scored average marks in the post-test compared to the pre-test.

The percentage (%) of students who performed badly in the pre-test is 70% compared to the percentage of students who performed badly in the post-test, that is only 30%. The module has helped these students to upgrade their performance in writing from bad to the average level.

All the students agreed that the module has helped them in writing letters of invitation. This can be seen from the marks obtained by the sample in the pre-rest and post-test. The score of the students in the post-test is higher than the scores in the pre-test. None of the students obtained scores lower than the scores in the pre-test.

Most of the students managed to write a complete letter of invitation. This can be seen from their total score obtained by the students in their assignment. Most of the students took about thirty to fourty minutes to finish the assignment.

The passing score for this assignment is 45%. The highest score 70% was obtained by student H whereas the lowest score 28% was obtained by student D. There are two students who performed badly in this assignment. They could not write an appropriate letter of invitation.

Most of the students obtained scores which is at the range of 50 – 70%. These results proved that the module has helped the students to write a letter of invitation correctly.

Most of the students mentioned that they would want to use a module to help them learn English in future. The researcher has summarised the students responses in the following table:

Table 1.8 : Students' Perception On Using Modules To Learn English In Future

Students' Responses	Numbers of Students
Yes	18 (90%)
No	2 (10%)
Total	20 (100%)

90% of the students in Table 1.8 agreed that they would use modules to learn English in future compare to only 10% of the students who disagreed with the idea. This shows that the number of students who would want to use modules in future is higher than the number of students who do not want to use modules to learn English in future.

2) What problems did the secretarial students encounter while using the module?

Although most of the students performed better in the post-test compared to the pre-test, they encountered a few problems while working on the module.

All the twenty students in the class agreed that they understood what was meant by the learning outcomes in the module. This means that the students did not face any problems in comprehending the learning outcomes. This probably because the learning outcomes were stated clearly and precisely.

However, there were three students (15%) who mentioned that they did not attempt all the questions in the activities given in the module.

Table 1.9 : Questions Not Answered By Students And its Reasons

Student	Question(s) Not Answered	Reason(s)
C	Exercise 2 Question 5	Do not know the answer.
D	Spelling session	Too difficult to remember.
S	Exercise 2 Question 2	Do not know the answer.

From Table 1.9, student C and S did not make an attempt to answer some questions in Exercise 2. The reasons stated were because they do not know the answer. Student D did not attempt the spelling session in the module on page 21. The reason was because it was too difficult for her to remember the spelling of the several words given in the module. This shows that Exercise 2 in the module posed a few problems to the sample.

All the students agreed that they had no problem in comprehending the assignment given to them at the end of the module. This shows that the researcher managed to design an assignment that is clear and comprehensible.

Most of the students spent about two to three hours working on the module. This can be seen in the following chart.

Table 1.10 : Time Spent On The Module By The Students

Length of time	Number of students
Less than 1 hour	0 (0%)
Between 1 – 2 hours	0 (0%)
Between 2 – 3 hours	16 (80%)
More than 3 hours	4 (20%)
Total	20 (100%)

From Table 1.10, 80% of the students took between 2 – 3 hours to complete the module compared to 20% who took more than three hours to finish the module. None of the students managed to complete the module between 1 – 2 hours or less than 1 hour. This shows that the module is appropriate to be completed within three hours.

However, while working on the module there was one student (5%) who mentioned that she needed a teacher to explain to her what she had to do while working on the module.

Table 1.11 : Students' Perception On The Need Of A Teacher While Going Through The Module

Students' Responses	Number of Students
Yes	1 (5%)
No	19 (95%)
Total	20 (100%)

From Table 1.11, it is shown that 95% of the students, said that they do not need a teacher's guidance while going through the module compared to 5% of the students who said otherwise. This shows that almost all the students do not need a teacher to explain to them what they should do when working through the module.

The researcher has inserted examples in the module so that the students will understand the content of the module better. Many students agreed that the number of examples given in the module is sufficient. This can be seen from their responses in the following table.

Table 1.12 : Students' Perception On The Number Of Examples Given In The Module

Students' Responses	Number of Students
Too Few	2 (10%)
Too Many	1 (5%)
About Right	17 (85%
Total	20 (100%)

From Table 1.12, 85% of the students said that the examples given in the module is sufficient for them to understand the content of the module compared to 10% of the students said that the examples given in the module were too few. 5% of the students said that the examples in the module were too many. It is known that most of the students agreed that the number of examples in the module are about right.

The researcher also found that there are several parts in the module that caught the interest of the students. The students responses on this part are presented, as follows:

Table 1.13 : Students' Responses On The Most Interesting and Enjoyable Part Of The Module

Students' Responses	Number of Students
The beginning of the module	12 (60%)
The tips on writing letters	2 (10%)
Grammar section	0 (0%)
Vocabulary - Words Are Fun	3 (15%)
The Assignment	0 (0%)
The feedback and comments	3 (15%)
Total	20 (100%)

Table 1.13 shows that 60% of the students mentioned that the most interesting and enjoyable part of the module is the beginning of the module. 10% of the students stated that the tips on writing a letter of invitation is the most interesting part of the module. The feedback and comments in the module have also been interesting and motivating for 15% of the secretarial students. More of the students liked the grammar section and the assignment. So in

conclusion, the majority of the students found the beginning of the module to be most interesting and enjoyable.

However there were problems that the students encountered while going through the module. 20% of the students said that they had some problems while working on the module.

Table 1.14 : Problems Faced By Students While Going Through The Module

Problems	Number of Students
The contents of the module were too much and confusing.	0 (0%)
The language used in the module is difficult.	2 (10%)
The instructions were not clear.	0 (0%)
The exercises were difficult.	1 (5%)
The grammar exercise was difficult.	1 (5%)
The answers in the module were not clear.	0 (0%)
Total	20 (100%)

10% of the four students who had problems with the module stated that the language used in the module was difficult. 5% of the four students stated the exercises on writing letters were too difficult and another 5% of the students said that the grammar exercise was difficult for their level. The researcher found that the sample faced problems in the area of language and completing exercises on writing letters of invitation as well as grammar.

3) What suggestions were made by the secretarial students to improve the module?

After indentifying the problems of the students the researcher wants to determine the suggestions from students to improve the module for future use. From the data collected, the researcher found that only eight students gave their suggestions. The rest of the students did not give any suggestions on the module. The researcher has collected and arranged the suggestions accordingly.

Table 1.15 : Students' Suggestions On How To Improve The Module

Students	Suggestions
B	Have more pictures in the module.
E and N	Make the language simpler.
F	Have more games.
K	The exercises should be easier.
M	The assignment should have more guidelines.
N	Examples on writing letters should be more.

Table 1.15 shows the suggestions made by the secretarial students on how to improve the module for future use. Two students mentioned that the language used in the module should be made simpler. Others gave suggestions to insert more pictures in the module, have more game – based activities, have simpler exercises as well as more examples on writing letters of invitation. One student also stated that the assignment should have more guidelines. It should be written in the form of guided letter – writing to facilitate their learning process.

Discussion

The aim of this study is to determine the effectiveness of using modules as self-instructional materials among secretarial students in a local private college. Questionnaires were distributed to the students to obtain information on using the module. The analysis of the data has given an insight to the researcher on some areas related to using of modules in an English lesson, as follows:

1) The students did better in the post-test compared to the pre-test.
2) Many students performed well in their assignment and their score ranged from 50 – 70%.
3) 90% of the students mentioned that they would want to use modules to learn English in future.
4) 20% of the students mentioned that they had problems while going through the module. Some of the problems are:
   i) the language used in the module was difficult.
   ii) the exercises on writing letters were difficult.
   iii) The grammar exercise was difficult.
5) The students made a few suggestions on how to improve the module. The suggestions made were:
   i) more pictures should be included in the module.
   ii) The language used in the module should be simpler.

iii) More game – based activities should be included in the module.

iv) The exercises in the module should be simpler.

v) The assignment should have more guidelines to facilitate the students learning.

vi) More examples on writing letters of invitation should be inserted.

The findings on the effectiveness of using modules on writing letters of invitation are further discussed as follows.

Students' Performance In Writing Letters of Invitation

Most of the secretarial students are rather weak in their writing skills, especially in writing letters of invitation. From the daily homework and the monthly test results, the researcher found that these students need assistance in improving their writing skills.

These students performed badly in their English paper at the SPM (Sijil Pelajaran Malaysia) level. Most of them passed with low grades and some even failed in the examination.

70% of the sample performed badly in their pre-test. This is due to their lack of knowledge in writing letters of invitation. However, after completing the module, the students performance in writing letters of invitation have improved. This is proven from their post-test results whereby 60% of the students obtained

scores at the average level, 10% scored good marks and 30% performed badly in the test. The number of students who had average performance in the pre-test have increased to fold from the number of students in the pre-test.

The students achievement in writing letters of invitation can also be seen from their performance in the assignments given to them at the end of the module. Most students scored marks at the range of 50 – 70% and only three students did their assignment badly. This was mainly because they could not write letters of invitation using correct format and grammar. These students have poor foundation in their grammar and vocabulary. Hence, these students need to be guided and given more exercises on writing and grammar.

However, 90% of the sample would want to use modules to learn English in future. This is probably because the modules have provided them with sufficient information on how to work at their own rate. Most of the students seemed to be satisfied with their performance in the post-test and the assignment. The students performance in the post-test as well as the assignment have proved to be better than their performance in the pre-test.

80% of the students were able to complete the module between 2-3 hours and some took more than 3 hours. The duration to complete the module differed among the students probably because of the differences in their learning abilities.

Problems Faced By The Students

Although most of the students managed to write a letter of invitation correctly at the end of the module, some of them faced a few problems while working on the module. From the data collected, four students (10%) had problems with the module. Some of the problems were:

1) The language used in the module was difficult.

2) The exercises on writing letters were difficult.

3) The grammar exercise was difficult.

Two out of the four students who had problems mentioned that the language used in the module was difficult. They could not understand some of the content of the module because of the language.

A few students also complained that the exercises on writing letters of invitation as well as the grammar exercise were difficult for them. The exercises in the module were meant to help the students to evaluate their own performance.

All the students understood the contents of the module, the learning outcomes as well as the instructions for each activity in the module. 85% of the students agreed that the examples in the module were sufficient. Giving examples to students in their learning process is a good way of teaching because students learn faster with examples. (Shulman, 1969).

However, three students (15%) did not attempt some of the questions given in the activities in the module. From the data collected, the researcher

found that all the three students did not answer some of the questions in exercise 2 on page 21 and 22. One student did not complete the spelling section on page 21 because she complained that it was difficult for her to memorize the spelling of the seven words given in the module. The other two students did not answer questions number 2 and 5. Their reason was they did not know the answer to the questions. From the data, the researcher found that exercise 2, which was meant to evaluate the students understanding of the meaning of the words and their correct use in sentences posed problems to some of the students.

95% of the students also stated that they did not need a teacher to guide and facilitate their learning process. This shows that the module is practical because the contents of the module were clear and precise. Students know exactly what to do and how to use the module step by step.

Besides that, 60% of the students stated that the module was interesting and enjoyable, particularly the initial part of the module. The activities in the initial post of the module were able to capture the students attention. The students were able to indentify with the situations given in the beginning of the module. This is one good way of teaching because asking students to relate their experiences in their learning process enhances their learning abilities. (Bloom, 1973).

The researcher also has included a word game in the initial part of the module. The game was successful in evoking students interests and it encouraged students to attempt the activities in the module.

15% of the students also mentioned that the feedback and the comments in the module motivating. This shows that feedback and comments should be included in the module as they motivates students and also enable them to assess themselves.

10% of the students mentioned that the tips on writing letters were explicit and clear. These tips were well organized in small manageable steps and the sample were able to comprehend the format of letter-writing without much problem. Self-instructional materials should have contents that are divided into small steps whereby students are able to facilitate their own learning without much of their teacher's guidance.

Suggestions Made By The Secretarial Students To Improve The Module

The sample had made some suggestions on how to improve the module. The students' suggestions are essential for reviewing and subsequently revising the module for future use.

Some of the suggestions gathered were:

1. Have more pictures in the module

One of the students requested for more pictures in the module as they would make the module more attractive and interesting. The pictures will

act as a stimulant to the students to proceed from one activity to another. However, too many pictures in the module will distract the students attention and not much of words that can be included in the module.

2) The language used in the module should be simpler

Two students gave the above suggestion. Some of the students found the level of English language used in the module difficult and this dimotivated them in proceeding to the other parts of the module. The level of English language used in self-instructional materials should suit students ability in the language. However, most of the students managed to complete the module without much complaints about the language.

3) Include more game – based activities

Having game – based activities in modules will boost the students interest to proceed with the module. Activities arranged in modules should be interesting and not boring. Students learn well if teachers can include some fun in their learning process. The researcher has included a few game – based activities, in the module such as the `Words Are Fun' and word-game activities.

4) Exercises in the module should be easier

Several exercises in the module are designed to help the students to evaluate their own performance. The exercises in self-instructional materials should be designed based on the students capability in a subject. (Gagne, 1973). Most of the exercises in the module were designed by the researcher according to the students capability in their writing skills.

5) The assignment should have more guidelines

The students were requested to complete the assignment at the end of the module. For this assignment students were required to write a complete letter of invitation based on a situation given to them. The students requested for more guidance in the form of short notes to help them write the letter.

6) Include more examples on writing letters of invitation

One student suggested that the module should have more example on writing letters of invitation. The researcher could have included more examples of complete letters of invitation.