CHAPTER IV
RESEARCH FINDING AND ANALYSIS

This chapter is going to deal with the finding and analysis of the research. This is possible to be done after the researcher completing the analysis. In this regard, the researcher has High School published by Erlangga.

There are five units reading materials which will analyze in this chapter. All of these reading texts are collected 10 reading texts from "English on Sky Textbook" for 9th grade of Junior taken from the reading passages, excluding some sub reading texts in every unit.

The following are the list of reading text titles which will be the data for analysis:

Table 1: Main Reading Passages in Each Unit of 9th Grade

No.	Title of Reading Text	Unit	Grade
1.	Eight glasses of water a day keep the doctor away	1	IX
2.	Snowy Owls, Large Prey Birds	2	IX
3.	Kangaroo (*Macropus rufus*)	2	IX
4.	DURIAN	3	IX
5.	Coconuts	3	IX
6.	The Nile River	4	IX
7.	The Bengawan Solo	4	IX
8.	River and Speed of Flow	4	IX
9.	The boy who cried "wolf"	5	IX
10.	The Fox and the Crow	5	IX

A. Kind of Text in Reading Material in English on Sky Textbook for 9th Grade.

From all above reading texts, the researcher will classify some types of reading text from every unit as can be seen below:

Table 2: Types of Genre in Each Unit of 9th Grade.

No.	Title of Reading Text	Genre	Unit	Page	Grade
1.	Eight glasses of water a day keep the doctor away	Procedure	1	40	IX
2.	Snowy Owls, Large Prey Birds	Report	2	66-67	IX
3.	Kangaroo (*Macropus rufus*)	Report	2	68	IX
4.	DURIAN	Report	3	96	IX
5.	Coconuts	Report	3	97	IX
6.	The Nile River	Report	4	134	IX
7.	The Bengawan Solo	Report	4	136-137	IX
8.	River and Speed of Flow	Report	4	139	IX
9.	The boy who cried “wolf”	Narrative	5	164	IX
10.	The Fox and the Crow	Narrative	5	165-166	IX

Thus, it can be seen that the number of each reading types is:

Table 3: Total Number of Each Genre

No.	Genre	Sum
1.	Procedure	1
2.	Report	7
3.	Narrative	2

Based on the above table, it can be seen that there are three text types found in analyze textbook. The dominant is report text, and then continued by narrative and procedure texts.

In English on Sky Textbook for 9th grade level of Junior High School, there are three types of texts; procedure, report and narrative.

B. Analysis of Lexical Density

To analyze the lexical density, this analysis will measure it with counting the number of content words as a percentage of the total number of words. The researcher used the technique of marking kinds of content words and grammatical function words in the sentences. The content words were marked in bold and grammatical function words were marked in italics.

Text 1

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

Eight Glasses *of* **Water** *a* **Day Keep** *the* **Doctor Away**

Water *is* **very important** *for any* **kinds** *of* **living things**. **Humans** *can* **live** *more than two* **weeks** *without* **food**. *However*, they *can* **only live** *for eight to ten* **days** *without* **water**. **Water goes** *around the* **body** *through* **blood**. *It* **carries oxygen** *and* **food** *for* **cells**. *It* **cleans** *the* **body** *by* **bringing** *the* **waste** *in* **sweat** *or* **urine**. *It also* **keeps** *the* **balance** *of* **minerals** *in the* **body**. *Most* **parts** *of* **human body use water** *to* **work**. *Someone cannot* **move well** *if there is not enough* **water** *in his or her* **body**.

Sixty five **percent** *of* **human body** *is* **water**. *To* **keep** *that amount of* **water** *in the* **body**, *someone* **must drink** *an* **average** *of eight to ten* **glasses** *of* **water** *each* **day**. **How** *much* **water does** *a* **person need every day**? *It* **depends** *on the* **volume** *of* **urine** *and* **sweat**. *An* **athlete** *who* **does** *a lot of* **physical exercise certainly needs** *to* **drink** *more* **water** *than a* **bank manager** *who* **spends** *most of his* **time** *in the* **office**. *Besides* **drinking**, *many* **kinds** *of* **food** *are also a* **good source** *of* **water**. **Fruit** *and* **vegetable**, *for* **instance**, *is eighty to ninety five* **percent** *of* **water**.

2. Counting the number of content words and the number of grammatical function words.

   Text 1 had 97 content words and 102 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$Lexical\ density = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

$$lexical\ density = \frac{97}{97 + 102}\ x\ 100$$

$$lexical\ density = \frac{97}{199}\ x\ 100$$

$$lexical\ density = 48.74\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 1 had 48.74 % lexical density. It showed that text 1 had lower lexical density.

Text 2

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

Snowy Owls, Large Prey Birds

Snowy Owls *or* ***Nyctea scandiaca*** *are* **large prey birds**. *They are* **diurnal**, *which* **means** *they are* **active** *during the* **day instead of night**. **Snowy owls breed** *in* **remote areas** *or* **Artic** *and* **Sub-Artic regions**, **mostly North America.**

As their **name suggests**, **snowy owls have dark white feathers** *with* **dark brown markings**. *Their* **feathers** *are* **thick covering** *even its* **legs** *and* **feet**. *They* **weigh** *around 1.6* **kg** *to 2* **kg** *and they* **stand** *about half a* **meter tall** *with the* **wing span** *of 1.5* **meters**. *They have a* **round white head**, *a* **black curved beak**, **yellow large eyes**, *and* **strong black claws**.

Snowy owls eat small mammals, *such as* **rats** *or* **rabbits** *and* **birds**, *such as* **geese** *and* **ducks**. *It always* **swallows** *its* **prey whole** *and* **uses** *the* **juice** *in its* **stomach** *to* **digest** *the* **flesh**.

A **snowy owl** *can* **swivel** *its* **head** *because its* **eyes** *don't* **move** in its **sockets**. A **snowy owl** *can also* **detect** *its* **prey** *in the* **dark** *because it has* **excellent hearing**.

In **terms** *of* **personality**, **snowy owls** *are* **generally silent** *and* **shy**. *Yet, they can be* **very aggressive** *if* **human** *or* **other animals approach** *their* **nest**.

2. Counting the number of content words and the number of grammatical function words.

   Text 2 had 114 content words and 80 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$Lexical\ density = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

$$lexical\ density = \frac{114}{114 + 80}\ x\ 100$$

$$lexical\ density = \frac{114}{194}\ x\ 100$$

$$lexical\ density = 58.76\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 2 had 58.76 % lexical density. It showed that text 2 had quite lexical density.

Text 3

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

Kangaroo (**Macropus rufus**)

The **Kangaroo** *is a* **common Marsupial** *from the* **islands** *of* **Australia** *and* **New Guinea**. **Marsupials** *are* **animals** *with* **pouch**. *They* **carry** *their* **babies** *in a* **pouch** *in the* **mother's abdomen**.

Kangaroo have *two* **strong legs** *with two* **long feet**. *They* **have** *a* **muscular long tail**, **large ears** *and a* **small head**. *They* **have short arms** *with* **clawed hands**. *The* **soft**, **woolly fur** *can be*

blue, grey, red, black, yellow *or* **brown**, **depending** *on the* **species**. **Females have** *a* **pouch** *in which the* **young live** *and* **drink milk.**

These **herbivores** (**plant-eaters**) **eat grass**, **leaves**, *and* **roots**. *They* **swallow** *their* **food** *without* **chewing** *it*. **Kangaroos need** *little* **water**; *they can* **go** *for* **months** *without* **drinking**, *and they* **dig** *their own* **water wells**.

These **shy animals live** *about 6* **years** *in the* **wild** *and up to 20 in* **captivity**. *Most* **kangaroos** *are* **nocturnal** (**active** *at* **night**). **Kangaroos** *can* **hop** *up to 74* **kilometers per hour** *and* **go** *over 9* **meters** *in one* **hop**.

2. Counting the number of content words and the number of grammatical function words.

   Text 3 had 90 content words and 70 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

   $$\text{Lexical density} = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

   $$lexical\ density = \frac{90}{90 + 70}\ x\ 100$$

   $$lexical\ density = \frac{90}{160}\ x\ 100$$

   Lexical density = 56.25 %

4. Analyzing the data to know the lexical density of the reading text based on the 9^{th} grade level of Junior High School.

   Based on the result above, text 3 had 56.25 % lexical density. It showed that text 3 had quite lexical density.

Text 4

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

D U R I A N

Durian *is* **classified** *as* **Durio zibethinus**. *It is* **native** *to* **Southeast Asia**. **Durian** *is* **known** *as* **'King** *of* **Fruits'**. *It is not only the most* **expensive fruit** *but also the most* **controversial fruit**. *It is the* **only fruit** *which is* **banned** *from* **airline cabins, hotels** *and some* **public transports.**

The **durian tree** *is* **large** *and* **very tall**. *It can* **grow** *up to 25 - 50* **meters** *and it* **has green elliptic leaves**. *A* **durian tree** *usually can* **bear fruit** *after four or five* **years**. *The* **durian fruit**, *which can* **hang** *from any* **branches**, **matures** *in about three* **months** *after* **pollination**. *The* **fruit** *can* **grow** *up to 30* **centimeters long** *and 15* **centimeters** *in* **diameter**. *The* **husk** *is* **covered** *with* **sharp thorns**. *The* **color** *of the* **husk ranges** *from* **green** *to* **brown**. *The* **flesh** *is* **pale yellow**. *It is* **very soft** *but* **not juicy**. *When it is* **ripe**, *it* **tastes sweet** *and* **smells very strong.**

Durian contains *a lot of* **sugar**, **vitamin C**, *and* **potassium**. **Durian** *is also a* **good source** *of* **carbohydrates**, **proteins**, *and* **fats**. **Durian** *is usually* **eaten fresh**. *Sometimes it is also* **cooked** *to* **make** '**dodol'** *or* **jam**.

Durian *used to* **be grown** *from* **seeds**, *but* **now** *it is* **propagated** *by* **grafting**.

2. Counting the number of content words and the number of grammatical function words.

   Text 4 had 60 content words and 96 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$\text{Lexical density} = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

$$lexical\ density = \frac{60}{60 + 96}\ x\ 100$$

$$lex\ ical\ density = \frac{60}{156}\ x\ 100$$

$$lexical\ density = 39.10\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 4 had 39.10 % lexical density. It showed that text 4 had lower lexical density.

Text 5

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

C o c o n u t s

Coconut *is a* **common name** *for the* **fruit** *of a* **tree** *of the* **palm family**. *It is* **classified** *as* ***cocos nucifera***. **People** *usually* **call** *the* **tree coconut palm. Coconut palm trees grow well** *in* **tropical countries**. *They* **grow especially** *on* **sandy soils**.

The **trees** *can* **grow** *up to 30* **m high**. *They* **have** *a* **single cylindrical trunk.** *At the* **top** *of the* **trunk**, *there is a* **crown** *of* **leaves**. *The* **leaves** *are* **long**, *about 3 to 4.5* **m long**.

The **fruit grows** *in* **clusters**. *In one* **cluster** *there are about 5-20* **coconuts**. *The* **fruit** *is* **oval** *and about 30* **cm long**. *It has a* **thick husk** *and a* **hard shell**. *Inside the* **shell** *there is* **white oily fresh**. *Inside the* **shell** *there is also a* **sweet fluid**.

Coconut is **high** *in* **sugar**. *It also* **contains** *a lot of* **fat**, **protein**, *and* **vitamin**. *The* **young coconut water** *can be* **very refreshing drink** *which* **contains** *a lot of* **minerals**.

Coconut palms *are* **very useful plants**. **People** *can* **use every single inch** *of the* **tree**. *They* **dry** *the* **coconut meat** *into* **copra**. *After that, they can* **get oil** *from it and* **use** *it for* **daily cooking** *or* **make** *it into* **soaps** *or* **candles**. **People** *also* **use** *the* **trunks** *to* **build houses**. *For the* **roof**, *they* **dry** *the* **leaves**. **People** *can also* **make rope** *and* **doormats** *from the* **coconut's husk**.

Coconuts *are usually* **propagated** *by* **seeds**, *but* **experts** *have been* **trying** *to* **clone coconuts** *or* **propagate** *them by* **tissue culture**.

2. Counting the number of content words and the number of grammatical function words.

   Text 5 had 126 content words and 116 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$\text{Lexical density} = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

$$lexical\ density = \frac{126}{126 + 116}\ x\ 100$$

$$lexical\ density = \frac{126}{242}\ x\ 100$$

$$lexical\ density = 52.07\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 5 had 52.07 % lexical density. It showed that text 5 had quite lexical density.

Text 6

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

The **Nile River**

The **Nile River** *is the* **longest river** *in the* **world**. *Its* **length** *is around 4, 180* **miles**. *It* **flows** *through* **Uganda**, **Sudan** *and* **Egypt**. *It* **has** *two* **main tributaries**. *They are the* **Blue Nile** *and the* **White Nile**. *The* **White Nile starts** *in the* **Great Lakes region** *of* **central Africa**. *The* **Blue Nile begins** *at* **Lake T'ana** *in* **Ethiopia**. *These two* **rivers meet near Khartoum** *the* **capital city** *of* **Sudan**.

There is another **shorter tributary**. *It's the* **Atbarah River**, *or also* **known** *as the* **Black Nile**. *However, this* **river flows** *only while there is* **rain Ethiopia** *and* **dries very fast**. *The* **Nile River ends** *in* **Mediterranean Sea**.

The **Nile River** *is* **important** *for* **agriculture**, **food**, **transportation** *and* **tourism**. **Farmers grow wheat**, **sorghum, citrus fruit, sugarcane** *and* **cotton along** *the* **Nile River**, *and they* **use** *the* **river** *to* **water** *their* **crops** *and* **plantation**. **People** *also* **fish** *this* **river**. *The* **river** *is used to* **transport goods** *to* **different places** *along its* **long path**. *The* **ships** *can* **travel up using** *the* **sail**, *and* **down using** *the* **flow** *of the* **river**.

Tourism *is another* **main advantage** *of the* **Nile River**. *Some* **special places** *to* **visit** *are* **Aswan, Luxor, Giza, Cairo** *and* **Khartoum**. **People** *who like* **adventure** *will* **find traveling** *this* **river exciting.**

2. Counting the number of content words and the number of grammatical function words.

   Text 6 had 121 content words and 88 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$\text{Lexical density} = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

$$lexical\ density = \frac{121}{121 + 88}\ x\ 100$$

$$lexical\ density = \frac{121}{209}\ x\ 100$$

$$lexical\ density = 57.89\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 6 had 57.89 % lexical density. It showed that text 6 had quite lexical density.

Text 7

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

The **Bengawan Solo**

The **Solo River** or the **Bengawan Solo River** is the **longest river** in **Java Island**. Its **length** is about 540 **km**. This **river** has its **source** at **Mount Lawu**, a **quite active volcano** in **Central Java.** It **flows passing** through the **Sewu Mountains**, the **Kendang Mountains** and into the **Solo valley.**

There are two **main tributaries** *that from this* **river**. *They are the* **Madiun** *and the* **Brantas Rivers**. *It* **ends** *in* **Java Sea** *near the* **city** *of* **Surabaya**. *The* **Solo River** *is not only* **important** *for* **farmers**, *but also for* **paleontologists**. **Scientists have made** *a lot of* **discoveries** *on the* **early human fossil** *in* **several places** *along this* **river**. *This* **fossil** *is* **known** *as* **Java Man Skull**.

In some **places people** *still* **use** *the* **river** *for* **transportation**. **Small boats** *are* **used** *to* **carry goods** *from one* **place** *to another*.

2. Counting the number of content words and the number of grammatical function words.

   Text 7 had 74 content words and 64 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$\text{Lexical density} = \frac{\textit{Number of Content Words}}{\textit{Total Number of Words}} \times 100$$

$$lexical\ density = \frac{74}{64}\ x\ 100$$

$$lexical\ density = \frac{74}{138}\ x\ 100$$

$$lexical\ density = 53.62\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 7 had 53.62 % lexical density. It showed that text 7 had quite lexical density.

Text 8

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

River *and* **Speed** *of* **Flow**

The **greater** *the* **speed** *of* **flow**, *the* **greater** *the* **amount** *of* **energy** *is* **produced**. *Like the* **volume** *of* **flow**, *the* **speed** *of* **flow** *is usually* **affected** *by a* **combination** *of* **factors**.

These **factors include** *the* **gradient** *of the* **river**, **texture** *of the* **river bed** *and* **banks**, **depth** *of the* **channel** *and the* **wetted perimeter**. *The* **wetted perimeter** *is the* **part** *of the* **river channel** *that is in* **contact** *with the* **river water**.

2. Counting the number of content words and the number of grammatical function words.

   Text 8 had 37 content words and 40 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$\text{Lexical density} = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

$$lexical\ density = \frac{37}{37+40}\ x\ 100$$

$$lexical\ density = \frac{37}{77}\ x\ 100$$

$$lexical\ density = 48.05\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 8 had 48.05 % lexical density. It showed that text 8 had lower lexical density.

Text 9

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

The **boy** *who* **cried** "**wolf**"

A **shepherd boy** *was* **looking** *after his* **sheep** *on a* **hill**. *He* **felt bored being alone** *on a* **hill**. *Then, he* **thought** *of a* **way** *to* **make** *some* **fun**.

While the **villagers** *were* **busy working**, *they* **heard** *a* **boy shouting**, "**Help**! **Help**! **Help**! A **wolf** *is* **attacking** *my* **sheep**!". "*That* **sounds** *from the* **shepherd boy**. *He is in* **trouble**. **Let's go** *and* **help** *him*," **said** *the* **villagers** *and* **rushed** *toward the* **hill**. *They were* **very surprised** *when they did not* **see** *any* **wolves** *on the* **hill**. *"Where's the* **wolf**?" *they* **asked**.

The **boy fell back** *and* **started laughing**. *The* **villagers realized** *that the* **boy had played** *a* **trick**. *They were* **angry** *and* **went back** *to* **work**.

The **next day**, *the* **villagers heard** *the* **shepherd boy shouting** *for* **help again.** *They* **rushed** *towards the* **hill**, *and* **again** *the* **boy laughed** *at them.*

On the third **day**, *a* **wolf really came** *and* **attacked** *the* **sheep**.

"**Help**! **Help**! *A* **wolf** *is* **attacking** *my* **sheep**!" **shouted** *the* **boy** *at the* **top** *of his* **voice**. *But nobody* **bothered** *him this* **time**. *The* **villagers thought** *that the* **boy** *was* **trying** *to* **fool** *them* **again**. *The* **boy watched sadly** *as the* **wolf killed** *all his* **sheep**.

2. Counting the number of content words and the number of grammatical function words.

   Text 9 had 105 content words and 98 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

$$\text{Lexical density} = \frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$$

$$lexical\ density = \frac{105}{105 + 98}\ x\ 100$$

$$lexical\ density = \frac{105}{203}\ x\ 100$$

$$lexical\ density = 51.72\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 9 had 51.72 % lexical density. It showed that text 9 had quite lexical density.

Text 10

1. Identifying which one includes the content words and which one includes the grammatical function words in a sentence.

The **Fox** *and the* **Crow**

One **bright**, **sunny morning,** *an* **ugly black crow perched** *on the* **branch** *of a* **tree**. *She* **had just stolen** *a* **tasty piece** *of* **cheese** *and was about to* **enjoy** *it*.

Just then *a* **dark brown fox passed** *by*. *He was* **very hungry**. *Then he* **saw** *the* **food** *in the* **crow's beak**. *His* **mouth watered**, *so he* **thought** *of a* **clever plan** *to* **get** *the* **cheese**.

The **fox** *looked up at the* **crow**, *he* **said**, "*I* **have** *always* **admired** *your* **beauty**, *with your* **soft**, **shiny feathers** *and* **nice beak.** *If your* **voice** *is as* **fine** *as your* **looks**, *you could* **be Queen** of *the* **Birds**!"

The **crow wanted** *to* **be** *the* **queen**. *So, to* **prove** *that she could* **sing**, *she* **opened** *her* **beak** *and* **made** *a* **loud** "**Caw**!" *Of course, when she* **opened** *her* **beak**, *the* **piece** *of* **cheese fell** *to the* **ground**.

The **fox happily snatched up** *the* **cheese** *and* **laughed**. *He* **said**," *My* **dear crow,** *your* **voice** *is* **fine** *but your* **opinion** *is* **not**. *You shouldn't* **believe** *everything you* **hear**! **Thanks** *for the* **cheese**!"

2. Counting the number of content words and the number of grammatical function words.

   Text 10 had 90 content words and 87 grammatical function words.

3. Counting the portion of lexical density by employing the following formula:

   Lexical density = $\frac{Number\ of\ Content\ Words}{Total\ Number\ of\ Words} \times 100$

   $$lexical\ density = \frac{90}{90 + 87}\ x\ 100$$

   $$lexical\ density = \frac{90}{177}\ x\ 100$$

   $$lexical\ density = 50.85\ \%$$

4. Analyzing the data to know the lexical density of the reading text based on the 9th grade level of Junior High School.

   Based on the result above, text 10 had 50.85 % lexical density. It showed that text 10 had quite lexical density.