

## **A Theoretical Framework on the Intensive Reading Approach towards ESL Students**

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### **ABSTRACT**

This paper focuses on developing a theoretical framework that focuses on the Intensive Reading approach. As such, this study analyses a few prominent theories that has been used for years in the teaching and learning of languages, and describes the important strategies that are used in the intensive reading approach among ESL students. This Framework provides details on the learning process to develop vocabulary through intensive reading.

## INTRODUCTION

The schema theory was first introduced by a British psychologist named Frederic Charles Bartlett in 1932. He was one of the precursors of cognitive psychology. The use of schemas as a basic concept was initially used by Bartlett as part of his learning theory. The theory proposed that a person's understanding of the world is formed by a network of abstract mental structures. Later, another prominent psychologist, Jean Piaget (1964) extensively used the term schema throughout his work from 1920 which became noble. According to Piaget's theory of cognitive development, children go through a series of stages of intellectual development. Piaget's theory indicates that a schema is both the knowledge and the process of acquiring that knowledge. In his studies, he constantly claimed that people are frequently adapting to the environment as they take in new information and learn new things. As experiences take place and new information is observed, new schemas are developed and old schemas are changed or modified. Similarly, Bartlett had explained in his study that there are 4 key elements of a schema:

1. An individual can memorize and use a schema without even realizing of doing so.
2. Once a schema is developed, it tends to be stable over a long period of time.
3. Human mind uses schemata to organize, retrieve, and encode chunks of important information.
4. Schemata are accumulated over time and through different experiences.

He further explained that the schema theory emphasizes on the importance of generic knowledge that will help the formation of mental representations. In the educational process, the task of teachers would be to help students develop new schemata and establish connections

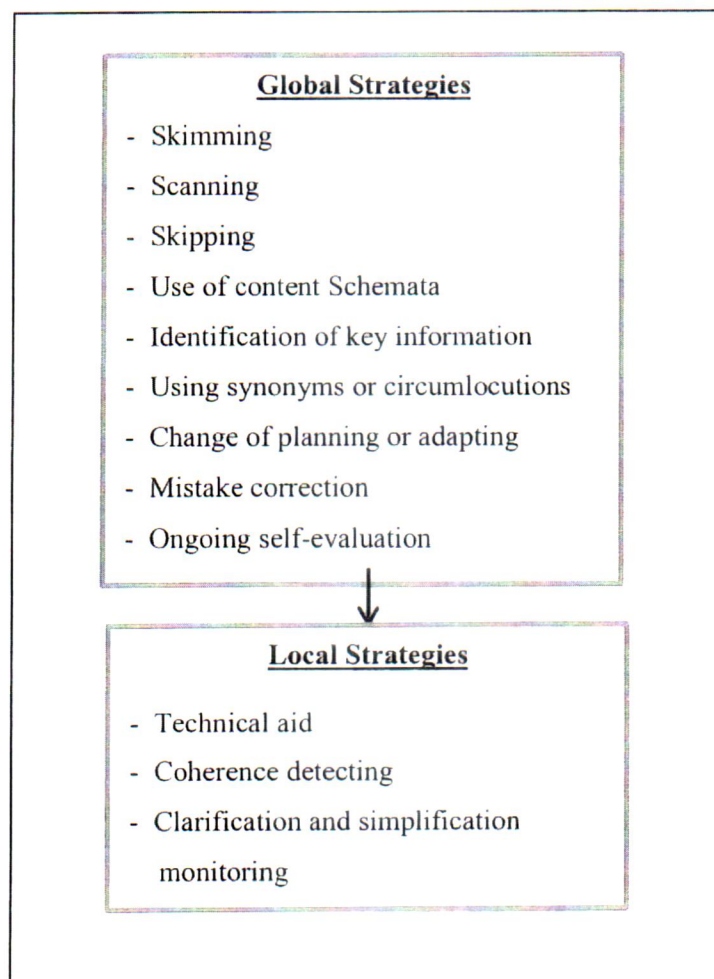
between them. It will be something that will eventually improve their memory. Of course, background information and prior knowledge are equally important. Bartlett (1932) verifies that the schema theory can be applied in various areas of study such as:

1. **Mathematical problem solving** - A research showed that 3rd graders taught to use schemata to solve mathematical problems performed better than their peers who were taught to solve them in four steps (read – plan to solve – solve – check).
  
2. **Motor learning** - Discrete motor skills are performed in a short period of time, and involve the use of our senses to understand what is happening and then of our bodies to take action. Since most movements are unique, our ability to perform a movement class is represented by three things, according to Schmidt (1975):
  - a) a generalized motor program that captures the basic movement form
  - b) a recall schema that provides info about specific situations and intentions
  - c) a recognition schema that allows us to realize a mistake we have made
  
3. **Reading comprehension** - Schema theory is often used to assist the learning of a second language, since it usually requires reading many texts in the target language. If we fail to create a sufficient number of schemata when reading a text, then reading comprehension and consequently mastering another language will become difficult.

## **LITERATURE REVIEW**

This research deems that the intensive reading method revolves very much around the schema theory as a lot of the intensive reading process deals with readers who are regularly exposed to new information or words in their reading classes and they would need to go through the schema

process to absorb and adapt to the new information to learn new things. As such, it is evident that new schemas are developed and old schemas are changed or modified in order to create a new learning experience. This view echoes with Sarig's (1987) description that the schema theory includes meaningful learning that requires active involvement of participants and the use of background knowledge that has been gathered through previous learning or experiences. This information is stored in the long term memory which is known as the schemata. The schemata, as understood, is a network of connected facts and concepts in the brain. One of the many function of the schemata is to provide structure to assign meaning and organizing information into hierarchy or general categories. Sarig (1987) has explained the process of reading which greatly relates to the schema theory and below is the illustration of his findings.



### Figure 1. Illustration of Reading Schema by Sarig (1987)

Figure 1 explains the illustrations of the reading schema analysed by Sarig (1987). In his study, he revealed that good readers are better at monitoring comprehension than poor readers. It was evident in his study that successful readers remembered meanings of passages while transferring those meanings to sentences while reading, and this was labeled as global strategies. In contrast, poor readers focused intensely on getting to know the meaning of unknown words or phrases while reading, which was known as local strategies. Poor readers rarely used their existing schema or knowledge to understand a new set of passage. Successful readers tend to use their existing general knowledge and focused intensely on the overall meaning of the text. These readers later integrated the new information with the old one to develop meaning to what they have read.

Successful readers were also able to distinguish main ideas from the supporting points. It was evident through this illustration that readers transferred reading strategies that are used in L1 reading to L2 reading. They tend to use global strategies while reading passages in L1 and local strategies while reading passages in L2. Local strategies mainly contributed to unsuccessful reading comprehension in L1 and L2. Hence the success or failure of reading comprehension can only be determined by the type of strategy used by the reader to get the meaning of a passage. Sarig's study concluded that the less proficient readers used local strategies and proficient readers applied global strategies in their reading. Relatedly the schema theory also involves the use of content schemata which is very much related to word identification. Additionally, it identifies key information and synonyms related to words or terms used. A change in the use of word or word adaption is seen when the student understands the meaning of the word and uses it in a similar context.

Equally, Piaget (1964) introduced a newer theory that was an 'upgraded' version of the schema theory, known as the Cognitive theory. It was used extensively in many of Piaget's studies and other language learning related studies. There are three basic components to Piaget's Cognitive theory:

1. Schemas - building blocks of knowledge.
2. Adaptation - processes that enable the transition from one stage to another (equilibrium, assimilation and accommodation).
3. 4 Stages of Development:
  1. Sensorimotor,
  2. Preoperational,
  3. Concrete operational,
  4. Formal operational.

Piaget (1952) defined a schema as cohesive, repeatable action of classification possesses that are closely interconnected and controlled by a core meaning. It is illustrated as a mental model of one's own world and that one would not be able to obtain information from their past experience or to plan future actions without the existence of a schema. Schemas are the basic building blocks of such cognitive models and enable one to form a mental representation of their surroundings. As an example, a child may first develop a schema for a horse. He knows that a horse is large, has hair, four legs, and a long tail. Later when the boy sees a cow for the first time, he might call it a horse too. This is due to the fact that he remembers all the characteristics of a horse and it fits in with his schema for the characteristics of a horse which is large, has hair, four legs, and a tail.

When he is told that this is a different animal called a cow because of its horn and rounder body, he will modify his existing schema for a horse and create a new schema for a cow. Later when he sees a pony for the first time, he might mistakenly identify it as a dog. When someone explains to him that a pony is actually a very small type of horse, he will have to modify his existing schema for horses. He will now realize that though some horses are very large animals, others can be very small too. Through his new experiences, his existing schemas are modified and new information is learnt.

Piaget's (1964) study describe that the processes where schemas are adjusted or changed are known as assimilation and accommodation. In assimilation, new information is joined into pre-existing schemas. In accommodation, existing schemas might be altered or new schemas might be formed as a person learns new information and has new experiences. Figure 2 below is an illustration of the Cognitive theory which was modified from the Schema theory by Jean Piaget in his study done in 1964.

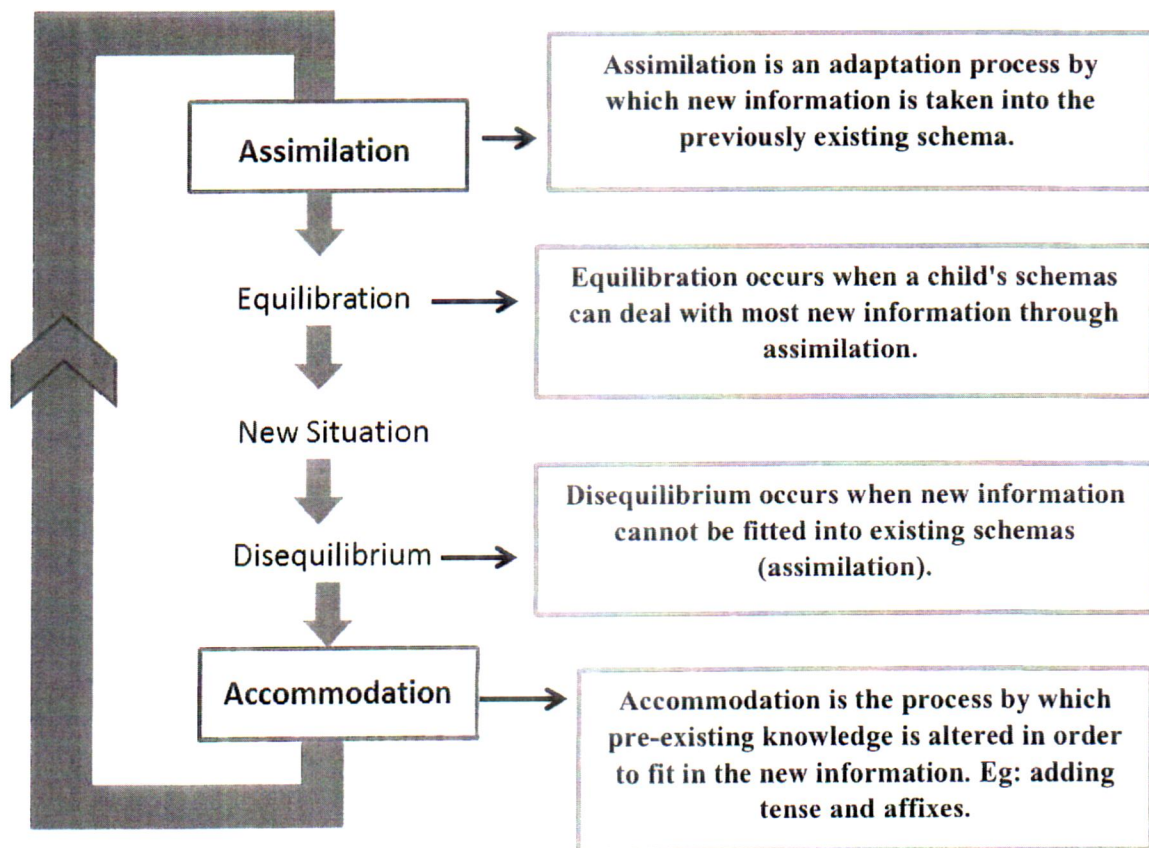


Figure 2. The Cognitive theory by Jean Piaget (1964)

Piaget (1964) proposed that learning is a dynamic process comprising successive stages of adaption to reality during which learners actively construct knowledge by creating and testing their own theories about their surroundings. Piaget's theory focuses on two main domains; the mechanisms in which cognitive development takes place and the four main stages of cognitive development that a child goes through. Piaget's theory substantiates that all cognitive development, that includes intellectual and affective development, progresses towards complex levels because learning is an active rather than a passive process. Piaget added that learning should be whole, authentic and realistic to be effective. For example, learners who already have the cognitive structures needed to repair a fused bulb, will certainly have some of the structures necessary to set up a table lamp, but their existing structures will be needed to be modified to accommodate the

newly gathered information to solve the new problem. Consequently, learners adapt and develop by assimilating and accommodating new information into existing cognitive structures.

Jean Piaget's cognitive theory was a learning theory that highly focused in knowing what went on 'inside the learner's head'. Essentially, the researcher paid attention to the processes that takes place in the reader's mind when learning happens. Thus, Piaget and William Perry developed a cognitive approach that focused on mental processes rather than observable behaviour as they were strongly dissatisfied with the Behaviourism approach that emphasised on observing behaviour as a process of learning. In their theory, they explained that knowledge is seen as something that is actively constructed by learners based on their existing cognitive structures. From the theory, it is most evident that understanding the learner's existing intellectual framework is crucial to comprehending the learning process. Learning is described as a process of active discovery because knowledge is actively constructed through the existing schemas. In this phase, the role of the teacher is not to drill knowledge into students through regular repetition or stimulate them to learn carefully through positive and negative reinforcements such as rewards and punishments. Hence, they urged that teachers have to play a major role in facilitating students with new findings by supplying the necessary information.

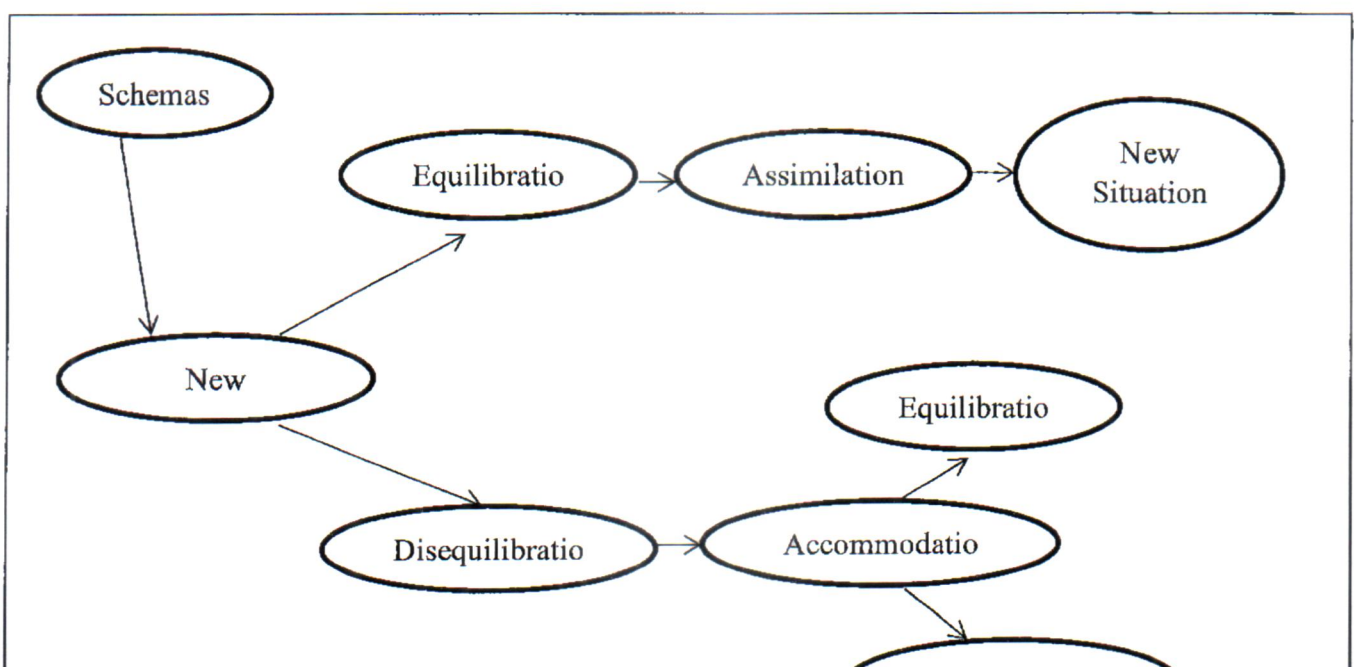
The cognitive theory can be labelled as a planned approach to guide learners as they attempt to assimilate new knowledge to old and to modify the old to accommodate the new. This means that teachers must consider the learners' knowledge that is currently possessed or learners level when they plan or construct lesson plans and activities according to the curriculum and structure new learning materials. Unlike the behaviourist learning theory, where learners are thought to be motivated by extrinsic factors such as rewards and punishment, cognitive learning theory sees motivation as largely intrinsic. Successful learning requires a major personal

investment from the learners' part because it involves significant restructuring of existing cognitive structures (Perry, 1999). Learners must accept the limitations of their existing knowledge and understand the need to modify the existing beliefs. This explains why external rewards and punishments are inadequate to motivate learners as some form of internal motivation from the learners themselves is greatly needed to help learners.

Similarly, the cognitive theory relates notably to what was introduced by Noam Chomsky in many of his studies. Chomsky claimed that learners are born with an innate capacity to learn language which is controlled by the Language Acquisition Device (LAD), a device in the brain that is in charge of language learning. He explained that the LAD is a hypothetical tool in the brain that helps children quickly learn and understand language. Noam Chomsky stated that the LAD is linked to the rapid speed at which children seem to learn language and its rules. He also substantiated that children are open and vulnerable towards learning many languages at a time when they are younger, provided the LAD is activated for these language to be stored. This significantly reveals that learners are able to learn a language or new words easily as there is an existing mental device in their brain to learn, adapt and store new words. The brain is open to the learning and understanding of new words to build language. Hence, it is mere impossible for incompetent readers to understand and learn new words unless the learning strategy that is used is suitable and effective. Also, Chomsky's study strengthens the cognitive theory and adds to the possibility that if a learner's brain can learn and store words, they should also be able to use the words in other context separately. In the same way, when learners pick up a word through reading, this word that is later stored should be able to be retrieved and used when they write. The LAD experiment later evolved into Chomsky's greater theory which was the Universal Grammar.

Additionally, the Sociocognitive Processing Model also focused on language learning specifically Reading. The model explains that the reader, the text, the teacher, and the classroom community are all involved in the construction of meaning in a reading activity. 'The role of the classroom's social context and the influence of the teacher on the reader's meaning negotiation and construction are central to this model as it explores the notion that participants in literacy events form and reform meanings in a hermeneutic or interpretation circle' (Ruddell & Unrau, 1994). From this study, it can be learnt that the sociocognitive processing model looks at reading comprehension as a process that involves meaning negotiation within the text itself, the readers or students, teachers, and other members of the classroom community. The text, readers, teachers, and other members of the classroom community together with the existing schema are all brought collectively to the negotiation task where a mutual meaning is reached. Negotiation task here emphasises on the teacher's role as a facilitator of the instructional setting as being knowledgeable about the teaching and learning strategies. This again boils down to the participation of the learners in active and realistic learning as a part of the negotiation task to negotiate or convey meaning as observed in Piaget's cognitive theory.

Figure 3 depicts an illustration of Piaget's Learning Model from the cognitive theory which is prominently associated with meaning negotiation.



### Figure 3. Piaget's Learning Model from the Cognitive Theory

From the figure above, it can be understood that the Cognitivist teaching method aims to assist students in assimilating new information to existing knowledge, and allowing them to make suitable modifications to their existing cognitive structure to accommodate the new information. Cognitivists emphasise on strategies that help students to actively assimilate and accommodate new information. Cognitivists such as Ann Leslie Brown and R.A. Ferrara have also suggested methods which require students to monitor their own learning because learning is largely self-motivated in the cognitivist framework which was also emphasised in Sarig's (1987) study. Among other methods that have been suggested by some psychologist is the use of learning journals by students to monitor progress and highlighting any recurring difficulties. Piaget's theory was broadly accepted by many researchers' and it has a significant influence on subsequent theories of cognitive development.

As much as Piaget's theory was well accepted by many researchers, there were several researchers who rejected the theory. Lev Vygotsky was one well-known researcher in the field of

psychology who rejected Piaget’s theory and he introduced other notable terms and theory related to cognitive development. It is apparent that many methods and approaches to teaching have been greatly influenced by the research of Jean Piaget and Lev Vygotsky. Both these researchers have contributed to the field of education by providing clear explanations about children's cognitive learning styles and abilities. While Piaget and Vygotsky may vary on the way they view cognitive development in children, both the researchers offer educators an array of valuable suggestions on ways to approach and teach students at different levels effectively.

Table 1 shows the comparison between the models introduced by Piaget and Vygotsky.

Table 1. Comparing Cognitive Constructivism and Social Constructivism

<b>Approaches</b>	<b>Cognitive Constructivism</b>	<b>Social Constructivism</b>
<b>Introduced by</b>	Jean Piaget	Lev Vygotsky
<b>Knowledge</b>	Knowledge systems are actively constructed by learners based on existing structures.	Knowledge is socially constructed - surroundings
<b>Learning</b>	Active assimilation and accommodation of new information to existing cognitive structures.	Involvement of learners into knowledge community.
<b>Motivation</b>	Intrinsic	Intrinsic and Extrinsic

<b>Instruction</b>	The teacher facilitates learning by providing an environment that promotes discovery.	Collaborative learning is facilitated and guided by the teachers.
<b>Concepts</b>	<ul style="list-style-type: none"> <li>- Schema</li> <li>- Assimilation</li> <li>- Accommodation</li> <li>- Equilibration</li> </ul>	<ul style="list-style-type: none"> <li>- The Zone of Proximal Developments (ZPD)</li> <li>- Scaffolding</li> <li>- The More Knowledgeable other (MKO)</li> </ul>
<b>Principles</b>	<ul style="list-style-type: none"> <li>- Learning is an active rather than passive process.</li> <li>-“Learning should be whole, authentic and real to be effective”.</li> </ul>	<ul style="list-style-type: none"> <li>- Introduced language as a psychological tool.</li> <li>- Social interaction is very essential in acquiring knowledge.</li> <li>- Tutoring and facilitating is highly needed for learners.</li> </ul>

As seen in Table 1 Piaget’s cognitive constructivism theory focused mainly on cognitive development in children and adolescents. His theory described and explained the changes that take place in the mind of children and adolescents which lead to logical thinking. Piaget proposed that children proceed through four stages based on maturation and experience which are sensorimotor, preoperational, concrete operations, and formal operations stages. The theory is guided by assumptions of how learners interact with their environment and how they integrate new knowledge and information into existing knowledge. Briefly, he proposed that children are active learners who construct knowledge from their environment. Basically they learn through assimilation and accommodation. Complex cognitive development happens through equilibration. He concluded that the key for cognitive development is the interaction of learners with the physical and social environment.

On the other hand, Lev Vygotsky's theory of cognitive development focused greatly on the role of culture and social interactions compared to schemas or mental representations. Vygotsky claimed that speech is a major psychological tool in a child's development of thinking, and as children develop, their basic speech becomes more complex. Vygotsky's theory is guided by a few assumptions. First, he affirms that children develop through informal and formal conversations with adults. It was understood that the first few years of life are critical for development, as this is where thinking and language become increasingly independent. Following this, he introduced language as a psychological tool that connects children and people around them. As children age, complex mental activities start to develop and children can carry out basic social activities such as calling for help. At this phase, children can perform more difficult tasks with the help of adults. Also, challenging tasks that is done in this phase encourage significant cognitive development growth. Not found in other major studies, Vygotsky claimed that 'play' is important and allows children to stretch themselves cognitively. In short he affirms that tutoring and facilitating learners is highly necessary for learners to develop psychologically. Hence, it was assumed that both Cognitive Constructivism and Social Constructivism theories are very much relevant to any study that focuses on learning development. Yet the preference depends on whether the research intends to focus on cognitive development or development that is formed through culture and social surroundings.

## **FINDINGS**

From the literature that has been analysed, this study has incorporated the cognitive constructivism theory as one of the main notion of this study. As such a theoretical framework has been developed to be used as a guideline for the teaching and learning using the Intensive Reading Method.

Figure 4 below presents the theoretical framework of this study.

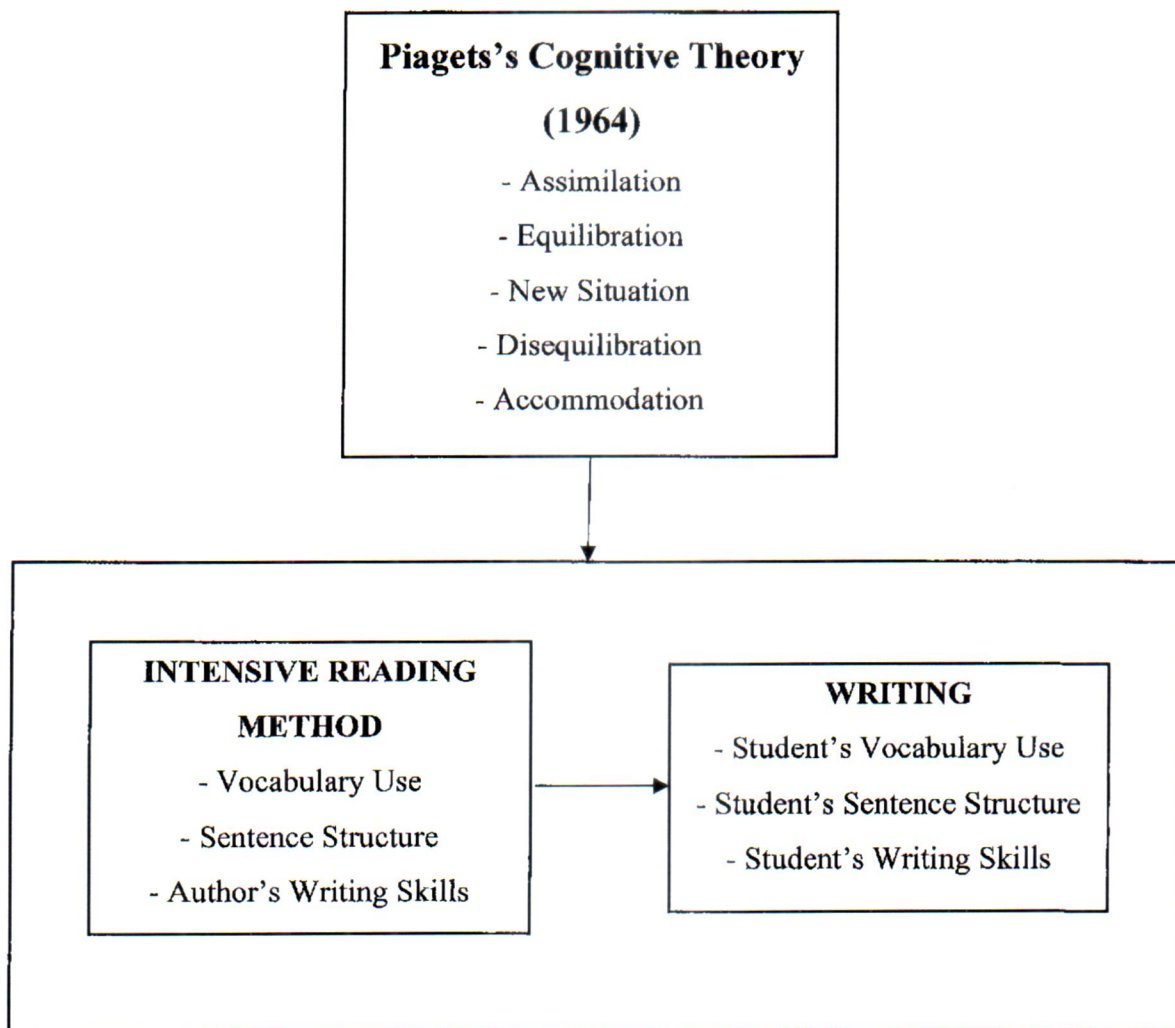


Figure 4. The Theoretical Framework of the Study based on Piaget's Cognitive Theory

Figure 4 represents the theoretical framework of this study. The box at the upper part of the diagram consists of the components that are in Jean Piaget's (1964) Cognitive theory. This

includes Assimilation, Equilibration, New Situation, Disequilibrium and Accommodation that will be further explained in Figure 5. The two boxes at the lower part of the diagram are the variables that will be studied in this study. The research intends to investigate if the intensive reading method can improve students' descriptive writing. The intensive reading method emphasises on vocabulary use, sentence structure and the author's writing skills. Therefore, the study intends to see if there will be any improvement in the descriptive writings on ESL students, specifically looking into students' vocabulary use, student's sentence structure and student's writing skills. The transfer of skills that will take place from the intensive reading to the descriptive writing will be shown as a process based on Piaget's Cognitive Theory. The process is explained below using each component of the Piaget's Cognitive theory that includes assimilation, equilibration, new situation, disequilibrium and accommodation. The following diagram below shows how each component of Piaget's Cognitive theory relates and functions in the theoretical framework of this study, to illustrate how the intensive reading method is used to teach descriptive writing.



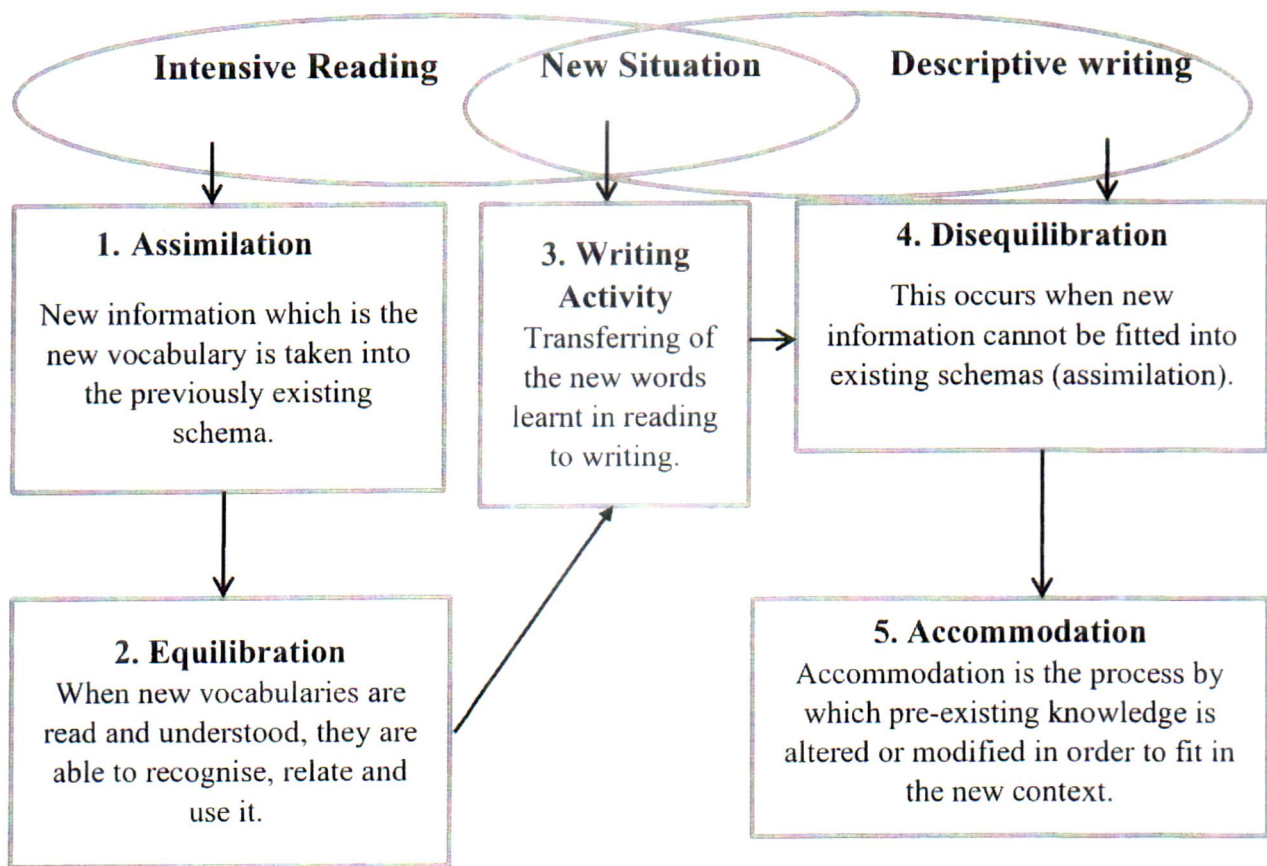


Figure 5. The Process involved in the Theoretical Framework of the Study

Figure 5 illustrates the detailed version of the theoretical framework of this study. It explains the processes that are involved in the theoretical framework that was presented in figure 4. The processes describe the flow of transferring reading skills into writing skills, specifically looking at the intensive reading method and descriptive writing which are the two main components of this study. To best illustrate the relationship between these two components, Piaget's cognitive theory was used to create a framework that can support the assumptions of this research.

Firstly, when students undergo the intensive reading method, they have words stored in their existing schema to comprehend the passage that is being read. Assimilation takes place when

new information is taken in class, it is expected that students learn new vocabulary to be stored in their schema. This is also known as an adaptation process. Secondly, equilibration happens when the new vocabulary that were read and understood, are able to be related and used correctly. In this study, it was understood that equilibration transpired when the vocabulary that was learnt through the intensive reading method was stored in the mind and later used without any modification.

However, when a new situation takes place in the setting, two different events happen. Again in this study, when the students were asked to use the new vocabulary that they have learnt and understood through the intensive reading method in a different context, there were possibilities for them to be able to use or not use the word. For example, during the descriptive writing activity after the intensive reading, transferring of the new words learnt in reading to writing happened. Disequilibrium occurred when the vocabulary cannot be fitted into the existing schemas which were constructed during the previous assimilation process. To overcome this problem, the pre-existing knowledge was altered or modified to fit in the new context. For instance, when the vocabulary is learnt in the intensive reading activity, it could just be a verb. However, this verb cannot be directly used in the descriptive writing. The students would need to modify the verb by adding a specific tense to the verb to fit the context of descriptive writing. This is called the accommodation process.

Another example is the common subject verb agreement rule. New information which is the new vocabulary and how it is used is taken into the previously existing schema. It is then understood and applied when other construction of sentences happens through the already-known SVA rule. Later, when students were supposed to use the words as collocations of vocabulary, they needed to modify the vocabulary by adding affixes to it. Observe the examples below:

1. The new words learnt: quick, sit, sleep, sound

Verb + Adverb → The adverb describes the Verb. Example: quickly sat, sleeping soundly

2. Also in some cases they would need to know which word could be linked to another word to acquire a correct meaning.

Adjective + Noun → The adjective describes the Noun. Example: pretty lady, sound person

3. This can also be applied in the use of phrasal verbs as illustrated in table 2.4 below. The new words learnt: come, cut, drop

Table 2

Examples of Phrasal Verbs

<b>Words</b>	<b>Meaning</b>
Come up	To think of an idea
Come in	To enter
Come across	To meet or find by chance
Come forward	To volunteer information about something
Cut off	to interrupt or stop something
Cut in	To interrupt someone when they are speaking
Drop by/in	To stop by for a visit, for a short time
Drop off	To leave something or someone in their destination

Table 2 shows that although a new word is learnt, they will need to alter or modify it to be used correctly in the suitable context. To know a word is to know the meaning of it as it is used in several different contexts. The intensive reading method was used in this study to train students to

not simply comprehend the meaning of a passage that is being read, but to also look at words and its meanings as used in that context.

## CONCLUSION

In brief, the cognitive constructivism theory was used in this study to assist students in assimilating new information into existing knowledge, and enabling them to make the appropriate modifications to their existing intellectual framework to accommodate new information. As such, it was observed that this prominent theory was the most suitable theory that has well depicted the overall framework of this study.

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