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Forms of Thinking Associated with Language Learning

A paper

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَقُلْ اَعْمَلُوا فَسَيَرَى اللَّهُ عَمَلَكُمْ وَرَسُولُهُ

وَالْمُؤْمِنُونَ وَسَتُرَدُّونَ إِلَى عَالِمِ الْغَيْبِ وَالشَّهَادَةِ

فَيُنَبِّئُكُمْ بِمَا كُنْتُمْ تَعْمَلُونَ

صدق الله العلي العظيم

(التوبة - ١٠٥)

Dedication

To my parents , who planted the seed of knowledge in my mind .

You have been my best supporter throughout my study.

To the most sacrificial person in my life, for every minute of her life, she sacrificed for me, for my mother.

To my first teacher in life and for all his hard work for me, for my father.

To my sister and my brother

Simply I dedicate this humble research for you .

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Abstract

This research delves into the intricate relationship between thinking processes and language learning, focusing on critical, analytical and creative thinking. It addresses the meaning of thinking, the various forms it takes, and how these forms can be effectively utilized in language learning. Drawing from psychological, philosophical, and neuroscientific perspectives, the study highlights the importance of critical thinking in evaluating information, creative thinking in generating novel ideas, and analytical thinking in breaking down complex language structures. By exploring the interplay between these thinking processes and language acquisition. The research aims to provide insights into enhancing language learning outcomes, through theoretical frameworks and practical examples, it demonstrates how fostering critical, analytical and creative thinking skills can enrich language learning experiences and facilitate deeper understanding and proficiency .

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Chapter One

Introduction

1.1 Statement of the Problem

Thinking refers to all the mental activities like daydream, wishes, fantasies, images of having new ideas, philosophical theorizing, political argument, making decision, reading, writing, and planning. There are a lot of forms of thinking including critical thinking, creative thinking and analytical thinking. Thinking is very essential in language learning. Learning occurs if the mind of the learners can connect the current level of knowledge with the prior knowledge during learning. English language teaching activity should promote thinking process of the learners for meaningful learning. Broadly speaking, learning is impossible without thinking process. (Waters ,2006:57)

This study tries to answer the following questions :

- 1.What is the meaning of thinking?
2. What are the forms of thinking?
- 3.How these forms of thinking can be utilized in learning language?

1.2 Aims of the Study

This study aims at identifying three forms of thinking (critical , analytical and creative thinking) and how they can be utilized in language learning.

This study aims to achieve the following:

1. showing the meaning of thinking.
2. Identifying the forms of thinking.
3. Explaining the relationship between forms of thinking and learning language.

1.3 Hypothesis of the Study

This study hypothesized that those forms of thinking can be positively utilized to achieve better language learning.

1.4 Value of the Study

This study is valuable in the field of language learning.

1.5 Limits of the Study

This study is limited to the forms of thinking in English language.

1.6 Procedures of the Study

The procedures which are tackled to achieve the aims of the Study are the following:

- 1- Selecting and limiting the topic.
- 2- Deciding the research plan.
- 3- Collecting and classifying references.

CHAPTER TWO

What are forms of thinking ?

2-1 Definition of Thinking

Defining" thinking "encompasses a vast and complex topic, so a single concise answer wouldn't do it justice. However, I can offer different perspectives on it depending on your interest :

Psychological Definition :

Defines thinking as" the mental manipulation of information, including processing, transforming, and organizing elements of knowledge to form ideas, solve problems, make decisions and understand the world around us ." (Schmaltz, 2022:9)

Philosophical Viewpoint :

Views thinking as" an active constructive process in which the mind is constantly reorganizing its experiences ." (Dewey, 1910:19)

Neuroscientific Approach :

Describes thinking as" the coordinated firing of billions of neurons across vast networks in the brain ." (Eagleman,2011:5)

Thinking is a higher mental process. In the literature It has been defined primarily In two ways; one category of definition consider thinking as a problem solving activity. While the other class of definition considers It as a mechanism of an Internal representation of the external world. Thus, thinking is a goal-directed behaviour. That is, it occurs in some context only and does not occur randomly. From choosing a dress to wear to solving a mathematical problem, all activities involve thinking.

Remember, thinking is a dynamic and multifaceted process, and uncovering its complexities can be an enriching journey !

2-2 Type of Thinking .

Thinking can be categorized Into various forms. Some of the most common types of thinking are as follows :

- 1- Critical thinking
- 2- Analytical thinking
- 3- Creative thinking

2-2-1 Critical thinking

It is a type of thinking that helps a person in stepping aside from his own personal beliefs , prejudices and opinions to discover the truth, even at the expense of his basic belief system .

The critical thinking is of a higher order well-disciplined thought process which involves the use of cognitive skills like conceptualization .

Here one resorts to set higher cognitive abilities and skills for the proper interpretation ,analysis, evaluation and inference, as well as explanation of the gathered or communicated information resulting in a purposeful unbiased and self-regulatory judgment .

An ideal thinker is habitually inquisitive, well-informed, open-minded, flexible, fair-minded in evaluation, free from personal bias and prejudices, honest In seeking relevant information, skilled in the proper of the abilities like interpretation ,analysis, synthesis, evaluation. And drawing conclusion and inferences, etc .

Some people might find that the term 'teaching thinking' sounds a little vague. They might prefer something that sounds more precise like 'cognitive skills' or 'Higher Order Thinking' or 'critical thinking'. Critical thinking has been the most widely researched concept in education (Fisher, 2011). However, it is also a fuzzy term which is difficult to define and describe.

For example, defined critical thinking as "social practice" and concluded that "critical thinking is cultural thinking." (Atkinson, 1997:72). Other researchers consider it as "healthy skepticism." (Lipman, 2003:89) or an "ability to engage in reflective thinking in relation to the context." (Li & Wegerif, 2014).

Other definitions of critical thinking include "a cognitive activity, associated with using the mind." (Cottrell, 2005:1) and "skilled and active interpretation and evaluation of observations and communications, information and argumentation." (Fisher and Scriven, 1997 : 21) .

Despite the various understandings of the term, researchers and educators all agree that criticality is important in learning. For example, the ability to recognize, construct, and evaluate arguments, and the skills of analyzing, synthesizing and critiquing material are essentially the foundation of academic success in higher education. Much research in thinking skills in second language education therefore focuses on developing critical thinking through reading and writing. There is strong evidence that CT- integrated instruction improved student achievement. The research suggests positive outcome in speaking and listening through integrating thinking skills in teaching. (Yang, Li & Ye, 2013).

2-2-2 Analytical thinking

Analytical thinking, often described as the ability to break down complex information into its component parts, understand their relationships, and draw informed conclusions, is intricately intertwined with effective teaching.

Analytical Thinking Activities :

- Deconstructing: Students analyze primary sources like letters, diaries, and speeches, identifying key details, biases, and historical context .
- Identifying relationships :Students compare and contrast different sources, noting similarities & differences, and potential conflicts in perspectives .
- Evaluating: Students assess the credibility and reliability of each source, considering its author & intended audience, and potential biases .
- Inferring and concluding :Students draw conclusions about the causes and consequences of the Civil War & considering diverse perspectives and supporting their interpretations with evidence .

Putting Theory into Practice :

Here's an example of how analytical thinking can be embedded in a history lesson :

Topic: Analyzing primary sources related to the American Civil War .

Analytical thinking is not a passive acquisition but an active and ongoing process, by incorporating engaging activities, encouraging critical questioning, and fostering a culture of intellectual exploration, educators can empower students to develop this valuable skillset .

2-2-3 Creative Thinking

The act of creating an original and novel idea or object is known as creativity. One needs not to be a scientist or artist to become creative. It can also be found in all types of day to day activities like cooking, teaching, helping other, acting etc.

This type of thinking is associated with one's ability to create or construct something new ,novel or unusual. It looks for new relationships and associations to describe and Interpret the nature of things, events and situations. Here the individual himself usually formulates the evidences and tools for Its solution. For example, scientists, artists or inventors .

Creative thinking means that the prediction and inferences for the individual are new, original, ingenious and unusual. The creative thinker Is one who expresses new Ideas and makes new observations, new predictions and new inferences .
(Skinner,1953)

Two types of thinking are involved in problem-solving behaviour namely, convergent thinking and divergent thinking .Problems which have only one correct solution are known as convergent thinking .Whereas , when a problem has more than one correct solution then it uses divergent thinking. (Guilford,1950)

The field of creative thinking and its out part is quite comprehensive and built wide. It covers all the aspects of human accomplishments belonging to an individual's life .

Stages of Creative Thinking Wallas's (1926) proposed a classification of stages involved in creativity. He proposed that –:

Stage 1 :Preparation

This is the stage of collecting raw material about the problem at hand. One needs to familiarize oneself with the previous work, gaps, and problems of previous solutions in order to understand the task at hand. This process motivates to work more on the problem. In this stage ,divergent thinking plays an important role .

Stage II :Incubation

During the process of finding the solution, the person may feel stuck as he is not able to come up with the solution. During this stage, the person is not thinking about the problem consciously, but his mental processes are involved in finding a solution unconsciously. Studies show that many creative ideas come during the incubation stage when the person is in an idle state and not working actively on the problem .

Stage III: Illumination

This experience is the result of an immediate solution or insight into the problem at hand. The famous story of" Archimedes and golden crown" revolves around this illumination stage, where she/he suddenly understands a previously unsolved puzzle .

Stage IV :Verification: Evaluation and Elaboration

It is a fully conscious stage, in which the person evaluates the worth of the solution .He comes across during the illumination stage. Studies on creativity have suggested .That it is not necessary that the creative Insights will always be appealing in reality, sometimes it may turn out to be bad ideas .

Chapter Three

The relation between forms of thinking and language learning

Language is closely related to thought. They were intricately intertwined with each other. Language is not only the representation of thinking, but also shapes thinking. Different people have different thinking patterns. From a very young age, learning a language is the most important thing to do in life. Starting from our mother tongue, we then learn another language (usually English, Spanish, German or French). Learning – and teaching- methods though, don't always work as expected. Conventional teaching and learning techniques are starting to become a feature of the past now, as new methods are considered to be more efficient. Some of these techniques are critical, creative , and analytical thinking.

3-1.The Relation Between Critical Thinking and Language Learning

Critical thinking refers to some specific practices. First of all, critical thinking occurs when we doubt something ,a text, an idea, a political statement, a speech, a piece of information, an article .Second of all, it also occurs when we look at a specific issue or problem, from more than one perspective. Third of all, it also occurs when we criticize something, in a constructive way. For example, disagreeing with the words of a journalist, while pointing out the problem and supporting our opinion with arguments. Also, when critically viewing new information, we can find more meanings that might be indirect. Therefore, it becomes apparent why critical thinking is necessary when learning a language. (Clarke,2019:6)

Critical thinking and language learning support and affect each other. It is very important to realize that language learning can become much more efficient and interesting if critical thinking is applied and used. At the same time, critical thinking skills can be acquired and improved while learning a language, because of the variety of exercises and activities this process includes. Critical thinking is not dependent on language learning, when it comes to its improvement and formation whereas language learning needs critical thinking, as it has the goal of being as much efficient as possible. It makes language learning more interesting .It also develops skills that students can use in other parts of their lives. Critical thinking encourages deep processing. That's a fancy way of saying that the more deeply students think about something, the more likely they are to remember it. As adults we experience this when watching a TV show or reading a book. The more the TV show or book gets us thinking, the better we remember it. (Clarke,2019:6)

Let's take an example from class. Imagine we're teaching food vocabulary. We want students to remember the word "hamburger", so we get them to repeat this twenty times. That's a lot of practice of the word "hamburger", but there's not much (or even any) thinking involved. Compare that to a critical thinking activity. The teacher asks the students to divide the foods into two groups, healthy and unhealthy foods. The teacher asks the students which foods they think are healthy or unhealthy. The teacher listens to the learners, then puts the flashcards in the appropriate columns. The students say "hamburger" less, but they must think more. The more they think, the more they remember. Or, as Daniel Willingham says, "Memory is the residue of thought ." (Clarke,2019:7)

3-2The Relation Between Analytical Thinking and Language Learning

Language learning is not only a valuable skill for personal and professional development, but also a cognitive challenge that requires analytical thinking. Analytical thinking is the ability to break down complex problems into smaller parts, identify patterns and relationships, and apply logic and reasoning. The formation of analytical thinking patterns is a higher-order thinking skill that involves solving information into smaller parts to gain an in-depth and precise knowledge of the information in learning language .To identify and solve a problem, students need good analytical thinking skills. Analytical thinking skills are one of the essential parts of the problem-solving process. With good analytical thinking skills, students can make appropriate decisions to solve problems, such as answering questions. Methods in analytical thinking are categorized, namely the process of distinguishing, organizing, and attributing (Anderson 2015).

Analytic thinking involves “a detachment of the object from its context and a focus on attributes of the object, The purpose of education which is classified in the cognitive process in analytical thinking is about learning in sorting and determining the parts of relevant information from given information or object (distinguishing), determining how to organize parts or pieces of information obtained so that it can become the suitable set of information (organizing), and determine the purpose and point of view of the information (attributing)(Jiang,2016:17)

Inquiry-based learning which means a student-centered teaching method that encourages students to ask questions and investigate real-world problems. In this type of learning environment, students are actively engaged in the learning process and are given the opportunity to explore their natural curiosities. It can facilitate analytical thinking skills because they depart from a scientific problem presented in the learning process. Students are trained to recognize a problem, formulate ways or solutions to problem-solving, seek information or concepts related to the problem, conduct investigations with experimental or observational activities, conclude the results of experiments, and communicate them through inquiry-based learning and learning tools. In each syntax in inquiry-based learning, analytical thinking indicators are trained to train analytical thinking well. (Ramadani,2021:67)

The example of using analytical thinking in learning language is that in every day we find out that new words are used by native people in their speech and we don't know its meaning. Here our choice is to make in our mind analytical thinking by analyzing the speech of the speaker into parts to reach the intended meaning.. There are many tools and resources that can help you hone your analytical thinking skills and improve your language learning outcomes. Dictionaries, thesauruses, and glossaries can give you the definitions, synonyms, antonyms, and usage examples of new words and expressions. Grammar books, guides, and websites can help you review and practice the rules and structures of the language. Online platforms, apps, and games can test your knowledge, skills, and progress. Podcasts, videos, and articles provide authentic language input to analyze. Lastly, forums, blogs, and social media give you an opportunity to interact with native and non-native speakers of the language. (Ramadani,2021:67)

Analytical thinking can be a great asset when learning a new language, particularly if you are striving for a high level of proficiency and accuracy. It can help you comprehend the structure and rules of the language, such as grammar, syntax, and morphology, as well as recognize and avoid common errors. Additionally, analytical thinking can facilitate expanding your vocabulary by analyzing roots, prefixes, suffixes, and meanings. Furthermore, it can help you develop your reading and listening comprehension skills by distinguishing main ideas, supporting details, and implied meanings of texts and audio materials. Finally, it can help you refine your writing and speaking skills by organizing thoughts, arguments, and information in a clear and persuasive manner.(Miles& Huberman,1994:18)

3-3 The Relation Between Creative Thinking and Language Learning

Creative thinking means the ability to think outside the box, enough imagination to consider alternative solutions, and combining new and preexisting knowledge in original ways. These are all skills that teachers can have in English class. Creative thinking means responding creatively and imaginatively to a challenge, whatever its nature ,so Creative thinking requires open-mindedness. Implementing creative thinking in English language learning requires teachers to move away from the standard modality of instruction with its right vs. wrong polarity and be willing to relinquish some control in favor of a more learner-centered model. There are several ways teachers can use creative thinking in learning language and create the right environment to integrate creative thinking into the lessons.(Sehic,2016:2)

Example of using creative thinking in learning language is that the use of open ended questions ,often students are expected to respond to questions either with a correct or a wrong answer. Instead, teachers can use open-ended questions that enhance independent thinking and learning. Allow for conversations to flow and the lesson to develop organically whenever it can. This will help give the students a sense of ownership and responsibility over their learning process. Try to promote in-depth thinking with these questions. When students ask questions, the teacher has to encourage them to think more deeply and arrive at their own conclusions instead of giving them a single, straightforward answer. Some examples you can use are:

- How would you recap our last lesson in your own words?
- If you could have a conversation with anyone in history, who would you talk to and what would you talk about?
- You notice your classmate is struggling with a grammar concept. How would you approach them and how would you help?

Adopting creative thinking activities can increase students' interest and engagement during lessons(Sehic,2016:2)

Chapter Four

Conclusion

Thinking is a higher mental process. We use mental images, concepts, and prepositions in the process of thinking. Three forms of thinking, that have a relationship with learning language are Critical, Creative and Analytical thinking. These forms of thinking can be positively utilized to achieve better language learning. Critical thinking is important because learners will be equipped to make well-informed decisions, identify and evaluate arguments, and recognize assumptions and biases. Critical thinking skills will help students navigate a world of increasing misinformation, and will give them a competent and compelling voice with which to share their ideas. Creative thinking a person's ability to create a new or unusual idea. It means when someone thinking out of the box, it is important in the learning process to make a space for more conversation , which means more opinions, which means more ideas, and from these ideas comes at least a single creative idea .Creative thinking involves developing ideas, and motivation for learning is beneficial to the learning process. Analytical thinking can help you comprehend the structure and rules of the language, such as grammar, syntax, and morphology, as well as recognize and avoid common errors.

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