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Using Manipulative Materials to Teach English Vocabulary to Children

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Resumen

El desarrollo del vocabulario en la adquisición de lenguas extranjeras es un reto importante para los educadores. Este estudio explora el impacto de los materiales manipulativos en la adquisición de vocabulario entre niños en edad escolar que aprenden inglés como lengua extranjera. Se analizaron varios estudios utilizando un diseño de investigación cualitativo y exploratorio para comprender el papel de los objetos manipulativos en la mejora de los resultados del aprendizaje de idiomas. La investigación destaca que los métodos tradicionales de enseñanza de idiomas, aunque eficaces, mejoran significativamente cuando se complementan con elementos manipulativos como objetos, imágenes y herramientas audiovisuales. Estas herramientas refuerzan el aprendizaje y hacen que la adquisición de nuevo vocabulario sea más atractiva y efectiva al conectar las nuevas palabras con la lengua materna de los estudiantes. Los estudios se seleccionaron a través de una revisión bibliográfica y un análisis de contenido para evaluar cómo estos materiales manipulativos influyen en el aprendizaje de vocabulario. Los hallazgos sugieren que un enfoque equilibrado, que incorpora diversas herramientas visuales y manipulativas, fomenta una mejor retención y aplicación del vocabulario. El estudio concluye que la combinación de metodologías y técnicas puede ayudar a los estudiantes a adquirir un vocabulario rico y organizado, satisfaciendo las necesidades de comunicación académica y diaria.

Palabras clave del autor: enseñanza del inglés, adquisición de vocabulario, herramientas manipulativas, estimulación audiovisual, aprendizaje de inglés como lengua extranjera



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Abstract

Vocabulary development in foreign language acquisition is a significant challenge for educators. This study explores the impact of manipulative materials on vocabulary acquisition among school-age children learning English as a foreign language. Various studies were analyzed using a qualitative and exploratory research design to comprehend the role of manipulative objects in improving language learning outcomes. The research highlights that traditional language teaching methods, while effective, are significantly enhanced when supplemented with manipulative elements such as objects, pictures, and audiovisual tools. These tools reinforce learning and make the acquisition of new vocabulary more engaging and effective by connecting new words to students' native language. Studies were selected through a bibliographic review and content analysis to evaluate how these manipulative materials influence vocabulary learning. Findings suggest that a balanced approach, incorporating diverse visual and manipulative tools, fosters better vocabulary retention and application. The study concludes that combining methodologies and techniques can help students acquire a rich and organized vocabulary, meeting academic and daily communication needs.

Author keywords: english teaching, vocabulary acquisition, manipulative tools, audiovisual stimulation, english as a foreign language learning



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Dedication

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Introduction

Learning a second language while strengthening one's native tongue poses significant challenges, comparable to the complexities of teaching it accurately. Therefore, it is widely acknowledged that language acquisition should be a purposeful endeavor approached through thoughtful methodologies and employing tools and techniques that engage learners' senses. This research was primarily motivated by Wallon's (1980) emphasis on individual differences in information perception, considering the influence of the social environment on children's daily lives and its impact on language acquisition and development. Consequently, it is vital to recognize and see the diverse ways pupils learn and adapt information within their environments, as each person has a unique approach to processing and assimilating information (Wallon H. , 1980).

This research synthesis is structured into five chapters. Chapter one provides an overview, encompassing a description, background, problem statement, research questions, and objectives. Chapter two presents the theoretical framework, discussing fundamental concepts such as vocabulary acquisition and the role of manipulative materials like images in achieving this goal. It includes a literature review summarizing relevant research on vocabulary acquisition through manipulative materials. Chapter three outlines how qualitative and exploratory research was conducted and why specific studies were selected based on predefined criteria. Chapter four analyzes the chosen studies. Finally, chapter five presents the findings and recommendations derived from the research synthesis.

Chapter I: Description of the Research

Background of the Study

According to Irfan et al (2021), vocabulary is the fundamental basis for acquiring other language skills, such as listening, speaking, reading, and writing. Their observations indicate that current vocabulary teaching methods are outdated, uninteresting, and fail to engage students effectively. Consequently, students become bored and disinterested, which leads to a lack of motivation to learn.

A study by Zahorik (1996) emphasized that “nearly every teacher saw hands-on activities as critical to establishing and maintaining student interest” (p. 551). This shows the significance of using manipulative materials in the classroom to actively engage students in the teaching-learning process, which is likely to make students feel more motivated and involved, fostering interactions in real-life environments. In the same line, Concannon-Gibney (2021) stated that

students creatively embody vocabulary through costume design and interactive displays, approaches that foster both creativity and enjoyment among children. This active engagement deepens their understanding of vocabulary. It also encourages its practical application in diverse activities involving hands-on participation and facilitates their comprehension and retention of newly learned vocabulary beyond the classroom setting. Moreover, teachers must consider how they teach vocabulary. Al-Yaseen (2021) mentioned that teachers need to use manipulative materials to teach it. They could use real things and perform different activities through manipulative materials while students acquire vocabulary. This author expressed that with manipulative materials students can learn language and have something to handle as they learn.

Finally, Bunting et al. (2021) mentioned the necessity of innovation in terms of didactic proposals and that manipulative materials are an excellent tool for the acquisition of the English language and thus achieve significant learning in which students are active participants in their own learning.

Problem Statement

In Ecuadorian schools, students often struggle to achieve English language learning objectives, partly due to teachers' lack of preparedness to use innovative techniques for teaching vocabulary. In that regard, Vassiliou and Šemeta (2012) emphasized that vocabulary instruction holds greater importance than grammar or syntax in attaining proficiency in foreign languages. Thus, teaching vocabulary remains a significant challenge, as educators often rely on rigid and uninspired methods that hinder effective language acquisition. This issue persists in Ecuador, where teachers do not deviate from traditional approaches and fail to incorporate strategies that relate English vocabulary to real-life contexts (Triana et al., 2016). Similarly, Bekes (2016) stated the necessity for innovative teaching methods in non-immersive English learning environments like Cuenca, Ecuador. Without regular use of the English language outside the classroom, students struggle to remember vocabulary after the lesson.

Moreover, authors such as Holstermann et al. (2010) emphasized that the deficiency of manipulative materials in classrooms contributes to student demotivation and is not conducive to effective vocabulary acquisition. On that matter, Berardo (2006) added that over-reliance on textbooks as the sole manipulative resource further exacerbates classroom monotony and reduces student engagement in English learning. To address these challenges, Lund and Douglas (2016) advocate for comprehensive teacher training in innovative methodologies, which could significantly enhance the effectiveness and appeal of English language instruction in Ecuadorian schools.

Rationale

Hashemi and Azizinezhad (2021) highlighted the importance of vocabulary acquisition in foreign language learning, noting that it enables students to form short phrases, sentences, and questions. Additionally, they established a distinction in teaching English between children and adults, advocating engaging elements such as brightly colored visuals, toys, puppets, and other similar objects to maintain their interest (Hashemi & Azizinezhad, 2021). Furthermore, Kralova et al. (2022) stressed that designing clear procedures and automating vocabulary requires a deep mental processing of the material, which leads to the formation of individual mental structures. This ability to recall vocabulary is directly influenced by the depth of this mental processing.

In short, these studies emphasize the significance of using interactive and visually engaging methods to teach English vocabulary, particularly to children. Such approaches foster engagement and facilitate effective language learning by enhancing students' ability to process and retain vocabulary effectively. These insights form the basis for justifying using manipulative materials to improve vocabulary acquisition in educational settings.

Research Questions

- How does using manipulative materials in English language teaching affect vocabulary acquisition?
- What are the perceptions of teachers and students regarding the use of manipulative materials in the EFL classroom?

Objectives

General Objective

- To describe the impact and perception of using manipulative materials to teach English vocabulary to children.

Specific Objectives

1. To evaluate the impact of using manipulatives in teaching English vocabulary.
2. To analyze the perceptions shared by teachers and students concerning the incorporation of manipulative materials in the EFL classroom environment.

Chapter II: Theoretical Framework and Literature Review

Theoretical Framework

Language is one of the first skills humans develop during early childhood. It plays a crucial role in social evolution, allowing individuals to acquire new skills through interaction and exposure to their social environment. This process involves word identification based on their sound, intonation, and the assignment of specific meanings to them (Martínez, 2020). Vocabulary, defined as the set of words acquired throughout life, is a fundamental aspect of language (Martínez, 2020). Given the importance of language acquisition and vocabulary development in early childhood, it is essential to establish effective methodologies for enhancing and sustaining these skills.

Vocabulary is a resource with unlimited potential when directed correctly. Therefore, it is crucial to closely observe language acquisition in children, considering their exceptional ability to learn words and other language elements due to their adaptability. The methods for learning and growing your vocabulary in a second language are connected to your daily experiences. Linking everyday activities, especially object manipulation, to language learning is beneficial (Siyanova-Chanturia & Webb, 2016).

During this process, a child's education should be rooted in their experiences with their native language. According to Bruner (1971), this approach expands children's knowledge by building on their understanding. Language acquisition begins even before children can express themselves in words. It is vital to connect concepts from children's daily lives to their prior knowledge, linking past experiences with new information to reinforce the acquisition of new knowledge.

To achieve meaningful learning, Bruner (1971) suggested using different forms of representations: enactive, iconic, and symbolic (Aramburu, 2006). In this model, enactive representation involves learning through action. Individuals represent facts and experiences through actions, making this representation highly manipulative and linked to proprioception (Aramburu, 2006).

Iconic representation, on the other hand, involves the development of images and complex spatial schemes to represent ideas or environments (Aramburu, 2006). Finally, symbolic representation uses symbols to convey ideas that do not necessarily originate from reality. These abstractions employ symbols to express imaginary thoughts and concepts that do not have to mimic reality (Aramburu, 2006).

Vocabulary Development

When addressing language acquisition, it is essential to mention the contributions of Vygotsky within the work of Moll (1978), who treats language as a skill enhanced by its environment, which he called the Zone of Proximal Development (ZPD). Vygotsky's theory is particularly relevant to understanding how children acquire new vocabulary through guided interaction with more knowledgeable others, including teachers and peers. The educational environment catalyzes new knowledge, reinforcing the information that the child absorbs, even if it is not conveyed in their native language (Moll, 1978). For Vygotsky (1978), the ZPD is crucial for acquiring new knowledge, later strengthened through individual practice. Initially, children can learn cooperatively with the help of more capable teachers or classmates. Eventually, individuals will have the ability to perform tasks independently and autonomously. The ZPD is split into two parts: the zone of achieved development and the zone of proximal development. The zone of achieved development consists of solving problems independently, while the ZPD involves executing and developing solutions with assistance (Moll, 1978).

This theory supports the idea that educators should scaffold students' learning experiences, particularly in vocabulary acquisition, by providing enough assistance to move students toward independent mastery of new words and concepts. Regarding language acquisition, educators should act as stimuli that encourage the acquisition of new vocabulary. They should use elements children can manipulate constantly and have mastered beforehand (Wallon H. , 1980).

According to Piaget (1977), daily stimuli, objects, and situations individuals experience must be represented in their brains to be later perceived through language, facilitating comprehension in children's minds. This cognitive process involves children's thoughts processing these perceptions, which is relatively straightforward due to the significant social component of language. This social aspect means interpretations are commonly shared within societies or specific circles.

Piaget (1977) also suggested that language development is a progressive process characterized by structured learning and influenced by collective elements that affect acquisition and transmission. Social interaction plays a crucial role in strengthening language through vocabulary acquisition, which begins with the initial perception and internalization of objects in the environment, thereby attributing meaning to them (Ibañez, 1999).

In this same context, Piaget (1977) emphasized the importance of objects acquiring meaning within a child's consciousness and how they become integrated into their knowledge. He

referred to these processes as signifiers, encompassing objects, situations, and stimuli in a child's environment that facilitate representation and are connected to meanings. Words, images, and gestures serve as symbols representing these signifiers. This concept of the symbolic function connects present objects with absent objects, where signifiers represent the present and schemas represent the absent, maintaining the meaning of the signifiers, such as words symbolizing objects (Ibañez, 1999).

Considering the above, every object in the environment serves as a signifier. Through manipulation, observation, and sensory processing, information is obtained and stored in the subject's working memory, allowing it to be accessed later. When processed by the senses, an object acquires intrinsic meaning, enabling reference to it, regardless of its presence in the subject's immediate surroundings (Ibañez, 1999).

In developing effective learning strategies, it is crucial to consider Ausubel's proposal, within the work of Viera Torres (2003) which points out that the use of traditional strategies such as memorization and mechanization of new information cannot fulfill the role of being the central mechanism within the pupil's learning process, because they are not capable of providing a real meaning for the learner that transcends to his consciousness; something that is crucial for the learning process to achieve the generation of a modification in the pupil's behavior and therefore learning (Viera Torres, 2003)

Gonzales (2000) defined learning as an interactive process that brings about internal changes in individuals, animals, or other living beings, actively and continuously modifying their psychological processes. This perspective forms the foundation of the approach to effective learning strategies.

Ausubel argued that traditional strategies such as memorization and mechanization of new information do not effectively serve as the central mechanism in a child's learning process. The reason is that these methods often fail to imbue real meaning to the child's learning experiences, which is crucial for fostering behavioral modification and genuine understanding (Viera Torres, 2003). This approach to learning emphasizes the importance of building upon the existing knowledge already present in the child's mind. Educators are encouraged to connect new thoughts and concepts with this foundational knowledge, making new information relevant and meaningful to the learners (Viera Torres, 2003).

By applying Ausubel's principles, educators can ensure that vocabulary instruction is not just about memorizing words but about integrating them meaningfully into the student's cognitive structure, thus enhancing long-term retention and understanding.

Vocabulary Teaching Tools

At the moment of conducting this research, it was considered the primary challenges teachers could encounter in in-class sessions and potential issues that hinder language acquisition.

These challenges include a lack of didactic resources, monotonous or invariable teaching strategies, a lack of a clear and concise methodology, disorganization in lesson plans designed for students, discontinuity in lessons, and repetitiveness in topics and content. Addressing these challenges is crucial for effective vocabulary instruction in EFL classrooms. Incorporating manipulative materials and interactive activities can mitigate these issues by making lessons more engaging and contextually relevant.

Castellanos (2007) stated that teachers must take responsibility for planning and executing learning and teaching processes. This approach involves conducting research, preparing thoroughly, and continuously enhancing their teaching methods while incorporating preparation and improvement of their teaching practice, considering technological and scientific advances to ensure the quality of the educational process. Meaningful learning is also nourished by the teacher's experience, technical knowledge, and dedication to teaching while planning and conducting their classes, despite the inherent challenges in this endeavor (Castellanos, 2007).

Furthermore, to facilitate meaningful learning in students, teachers should utilize educational methods that incorporate tools to achieve this goal. Methodologies to promote vocabulary acquisition and foster meaningful learning employ manipulative materials and images. Both tools leverage the power of images to represent and convey ideas and information effectively. These images function as semiotic elements, which are particularly crucial in the early stages of developmental learning. Semiotic elements enable the direct extraction of information, albeit in a figurative and symbolic form, necessitating interpretation by the learner (Gonzales Pereira, 2018).

Otazu (2012) noted that materials pupils can physically interact with using their senses are more representative. This physical interaction allows them to discern weight and depth, setting this approach apart from flat images. Moreover, manipulative materials also facilitate vocabulary development and the identification of implicit characteristics in the studied elements. According to Otazu (2012), these materials enable pupils to learn the names of specific objects and explore other related elements based on the physical characteristics of the objects themselves.

Thus, using manipulative materials in English teaching elevates the learning process by emphasizing visible, physical, and tangible characteristics for students. This approach aligns with Piaget's theories on cognitive development, where hands-on interaction with objects helps students form more concrete and meaningful connections with the language they are learning. This approach revolves around personal and individual sensory experiences, providing a meaningful and memorable learning experience that benefits students of all ages and backgrounds (Palacios, 2022). When comparing two-dimensional images, manipulative materials enable students to interact more directly with objects, potentially transforming their perception and comprehension (Palacios, 2022)

It is worth mentioning that manipulative materials can also become a representation of an object, just as a photograph or an image is. However, manipulative objects have the advantage of allowing subjects to interact with objects through sensory stimuli, allowing students to attribute intrinsic meaning to the object (Palacios, 2022). For Piaget (1977), this process would be how meanings are developed within the students' brains, thus allowing them to develop concepts and assimilate everyday objects (Ibañez, 1999).

Furthermore, the process by which images and objects are processed and manipulated significantly impacts the mental processes of individuals, particularly students. Images undergo a process of iconicity, which relates to the degree of realism perceived in an image compared to the object it represents (Perner, 1991). This author addressed the concept of iconicity and suggested that it can be iconic to a greater or lesser extent, depending on the extent to which observers identify it with common characteristics and factors. This approach aids individuals in decoding, analyzing, and reflecting upon the image. According to Perner (1991), this process similarly impacts all the information processing undertaken in daily life, affecting various learning styles and short-term and long-term memory. These differences become evident during the treatment and storage of perceived information (Perner, 1991).

Knowledge development focuses on acquiring a new language through methodologies to facilitate this process. Acquiring a new language is similar to developing one's native language, making the experiences comparable. Similarly, Krashen (1983) stated that acquiring a second language should be a natural and unconscious process, similar to how people acquire their first language. Through this approach, individuals develop communication skills, become aware of the communication processes specific to the second language, correct errors, and master its grammatical rules. This proficiency allows individuals to articulate new knowledge verbally and in writing (Krashen, 1983).

In that regard, Niño Jimenez (2011) pointed out the importance of enabling pupils to link new knowledge from subjects within their curriculum and apply it to learning a new language. This alternative involves leveraging traditional teaching methods that allow the absorption of new information, which originates in everyday teaching practices and applies to the native language, thereby strengthening the learning process. This dual approach allows the teachers to reinforce learners' knowledge in other areas while incorporating vocabulary through symbols. Linked to the tool proposed by Krashen (1983), this author argues that oral tools to develop vocabulary must be subtle and light, focusing on voluntary and short participation. Teachers should never force students to take part in speaking activities without their consent, as this can lead to anxiety, hindering their progress in learning a second language (Niño Jimenez, 2011).

Thus, it is advisable to encourage pupils to participate through play and visually and sensually identify previously known manipulable objects. They should be encouraged to participate in classes and receive feedback on their participation. This approach will strengthen their desire to continue participating and make learning a meaningful and memorable process.

Literature Review

Numerous studies have explored the significance of methodologies involving manipulative objects in language and vocabulary development, particularly in teaching English to EFL students. For instance, Sanchez (2009) conducted research with school-aged pupils in China, illustrating the motivational impact of using images on language learning and acquisition. His research demonstrates the essential role of visual aids in cultivating students' curiosity and engagement, which is crucial for sustaining their interest and involvement in language acquisition.

Building on this, Llorente (2000), in Spain, noted the transformative influence of integrating images into traditional English language teaching methods. By incorporating visuals, teachers could make abstract concepts more concrete, thereby enhancing comprehension and retention among students. Similarly, Madrid (2001), building on this idea, highlighted the practical benefits of utilizing didactic materials in English instruction, emphasizing their role in making learning interactive and experiential.

Meanwhile, Huedo (2013) focused on the effectiveness of visual and manipulative technologies in enhancing English vocabulary development. Her research revealed how interactive tools create immersive learning experiences, allowing students to engage with language in significant ways beyond memorization.

In the context of oral skills, Arias (2011), in Colombia, investigated cartoon image usage to enhance oral expression in English among high school students. His study indicated that incorporating visual aids stimulated creativity and fostered a comfortable environment for students to practice and refine their language skills. Similarly, Alape (2013) examined the impact of images on vocabulary acquisition among fifth-grade students, highlighting how visual methodologies catered to different learning styles and accelerated language learning processes.

Moreover, Cardona (2019), another Colombian researcher, reinforced the advantages of methodologies integrating visual stimuli, pointing out that such approaches facilitated deeper understanding and retention of new vocabulary. Through visual cues, educators can create multi-sensory learning environments to accommodate the students' diverse needs and preferences.

Exploring similar themes, Otazu (2012), in Peru, emphasized the practical utility of images and sensory manipulative materials in promoting English language learning among school-age children. His research highlighted how hands-on interaction with materials enhanced comprehension and concept retention, particularly in early developmental stages.

Similarly, Cerda (2014) from Ecuador discussed the pedagogical benefits of integrating audiovisual materials into English language instruction. By incorporating various media, teachers can enhance lessons and offer language learning experiences that connect with students' daily lives. In this line, Orozs (2018) stressed effective strategies for teaching English, advocating for the consistent use of visual and manipulative materials to reinforce vocabulary acquisition and language comprehension.

Palacios (2022), also Ecuadorian, conducted research at Libertad School, underscoring the ongoing relevance of manipulative materials in English learning. Her study emphasized how tactile engagement with materials enhanced vocabulary retention and promoted active participation and critical thinking skills among students.

Finally, Morocho and Cabrera (2022) examined children from the Alfonso Carrión Heredia school in Cuenca, Ecuador, finding that their response to visual stimuli, remained in their working memory for extended periods. Their findings underline the enduring impact of multisensory approaches in fostering deep and lasting language acquisition among young learners.

Overall, these studies demonstrate how incorporating visual and hands-on materials significantly enhances language learning, vocabulary development, and educational outcomes globally.

Chapter III: Methodology

Research Design

This project primarily employs a qualitative research approach, specifically a systematic review. According to Pant and Sharma (2018), bibliographical research involves compiling and synthesizing existing literature while specifying each referenced work.

The objective of this study was to gather comprehensive information through a systematic review of digital databases available in libraries, with a primary focus on ScienceDirect due to its extensive collection of full-text articles. Additionally, platforms such as Scopus, ERIC, and Google Scholar were used to find the most relevant information on the research topic. This approach ensures a rigorous and thorough examination of existing knowledge and insights pertinent to the study's objectives. In accordance with Esquirol et al. (2017), the review process involved an initial focus on titles and abstracts, followed by acquiring the full texts of the selected articles to locate and analyze the most relevant studies.

To achieve the study's objective, it was crucial to focus on the keywords used for electronic searches. The search terms included 'manipulative materials,' 'hands-on activities,' 'vocabulary acquisition,' and 'children learning English.' The inclusion criteria for selecting articles included full research articles that specifically addressed the integration of hands-on activities for English-based vocabulary acquisition on children. The exclusion criteria ruled out research summaries, and articles focusing solely on English-based science or math terminology instruction, ensuring the study's focus remained on language through manipulative materials.

Chapter IV: Results and Discussion (Analysis)

The Effects of Manipulative Materials When Teaching English Vocabulary to EFL learners.

Considering that the main goal of learning foreign language vocabulary is to incorporate words into the learners' mental lexicon, it is important to transform (procedural) their initial declarative (receptive, conscious, passive, explicit) knowledge into procedural (productive, subconscious, active, implicit) knowledge to enable the use of vocabulary in authentic communication (Kralova et al., 2022). This transformation aligns with the findings of Greenspan Shanker (2004), who emphasizes that deeper language processing is enhanced by positive attitudes and emotional involvement, activating neural pathways that facilitate multi-dimensional representations.

For that purpose, the use of hands-on materials in teaching English vocabulary to children has shown significant benefits. According to Concannon-Gibney (2021), positive emotional stimuli persist in memory longer, and people remember more accurately than neutral memories. This suggests that manipulative materials, by engaging students emotionally, contribute not only to vocabulary retention but also to overall emotional well-being. Therefore, repetition, retrieval, spacing, pacing, regular use, cognitive depth, personal organization, visualization, mnemonics, motivation, attention, arousal, and emotional depth are considered the most effective memory aids since learning of foreign language vocabulary is promoted by authenticity, context, and usefulness.

However, while these techniques are widely supported in the literature, few studies have examined the specific role of emotion-inducing stimuli in the context of language learning, particularly when compared to traditional audiovisual methods (Kralova et al., 2022).

On the other hand, Gitahi (2017) evidenced that most teachers expressed that the manipulative materials are very efficient for teaching the language, with 85% finding them effective, 10% somewhat effective, 3% less effective and only 1% not effective. This data contrasts with the limited focus on emotional stimuli in existing literature, suggesting that the practical effectiveness of manipulatives may derive from factors beyond emotional engagement, such as tactile interaction and cognitive reinforcement.

A comparative analysis of these studies reveals a potential gap in the research concerning the emotional dimension of learning with manipulatives. While Gitahi (2017) and Concannon-Gibney (2021) highlight different aspects of effectiveness—practical engagement and emotional retention—there is a need for further research to integrate these findings and explore their combined impact on vocabulary acquisition. This calls for a more nuanced approach in future studies that considers both emotional and cognitive factors in the use of manipulative materials.

The tables below shed additional light on the aspects involved in learning words, as well as the perceptions teachers have regarding the effectiveness of manipulative materials.

Table 1 What is involved in Knowing a Word

Study	Positive Emotional Stimuli Enhancement	Declarative Knowledge Enjoyment of Learning
Concannon(2021)	Yes	Significant
Gitahi (2017)	Yes	Significant

Table 2 Perception of the Effectiveness of Manipulative Materials

Perception	Percentage of Teachers (%)
Very Effective	85 %
Somewhat Effective	10%
Less Effective	3%
Not Effective	1%

The Most Useful Manipulative TPR activities to Teach English Vocabulary to EFL Learners.

Vocabulary researchers stress the need for repetition, stating that encountering a word just once or twice is inadequate for it to be remembered by a learner. Therefore, teachers should incorporate activities that reinforce previously encountered words. For instance, learners can engage with words individually, in pairs, and as a class, ensuring multiple exposures and discussions about the words (Siyanova-Chanturia & Webb, 2016). This strategy aligns with the cognitive reinforcement principles discussed earlier, emphasizing the importance of repeated engagement for vocabulary retention.

Additionally, creating a designated area in the classroom where students can interact with vocabulary daily promotes sustained engagement. It helps bridge the gap between isolated word encounters and long-term retention. Another effective strategy is to create a vocabulary box containing word cards, visual aids, spellings, and example sentences. Keeping the cards well-shuffled allows learners to practice sorting and matching them with their corresponding meanings (Magnussen & Sukying, 2021). These techniques promote active engagement and a deeper understanding of vocabulary, enhancing retention and application in various contexts.

In contrast to the primarily solid nature of these strategies, Siyanova-Chanturia and Webb (2016) also highlight the effectiveness of visual aids, such as posters and flashcards, in supporting vocabulary learning. This suggests that tactile and visual materials could offer a more comprehensive approach to vocabulary instruction. Table 3 summarizes the types of manipulative tools discussed, integrating tactile and visual materials to provide a holistic view of their potential applications.

Table 3 Description of Manipulative Tools

Type of Manipulative	Description
Task Cards	Students match cut-out parts to form a complete card
Blank Puzzles	Students take them apart and put them back together
Learning Circles	A large circle divided into parts for matching with clothespins
Sequence Strips	Students put parts of a sequence in order
Card Sorts	Students organize information in groups according to specific criteria
Pull-Ups Question Cards/Flip Sheets	Students place an answer in a corresponding hole and lift it to check Alternatives to dominoes and tee cards for answering questions.

Visual Manipulative Materials

According to Siyanova-Chanturia and Webb (2016), children also like to see all different kinds of visuals: Posters, flashcards, pictures, videos, picture books, or picture dictionaries for children. The best is to combine hand-made materials with factory-manufactured materials. Children like to be engaged in practical, fun activities and participate in making things like Christmas postcards or birthday cards. The table below shows more information regarding the type of visual material and the benefits to the classroom.

Table 4 Types of Visual Materials

Type of Visual Material	Benefit
Posters	Engages visual learners
Flashcards	Aids in quick recall and reinforcement
Pictures and Videos	Enhances understanding through visual representation

Picture Books/Dictionaries	Provides context and visual association
Handmade Materials	Involve students in

Total Physical Response (TPR) is a versatile method for practicing and teaching a wide range of concepts, especially effective in children's activities. This approach minimizes preparation for teachers, relying on basic language and universal preschool themes such as greetings, family members, numbers, colors, animals, house, body parts, food, fruits and vegetables, clothes, and weather across the four seasons (Keldgord & Ching, 2022).

According to Frydrychova (2013), some TPR activities, like songs, can involve body movement and cues to teach specific vocabulary. An example can be the popular song

"Head, shoulders, knees and toes" (traditional, nd) or "If you're happy and you know it" (traditional, nd).

Table 5 Songs as part of TPR activities

Song Title	Vocabulary Focus	Lyrics Excerpt
Head, Shoulders, Knees, Toes	Body parts	Head, shoulders, knees and toes, knees and toes
If You Are Happy	Body parts/actions	If you are happy and you know it, clap your hands

Additionally, TPR can be effective for teaching colors, as children actively engage in this activity by touching objects of the color named by the teacher. For instance, when the teacher says "red", all children search for something "red", then touch it, and say "red" aloud (Frydrychova, 2013). Another effective TPR activity involves a guessing game where children repeat phrases like "Hands up, hands down, it's big, it's small, what is it?" The teacher then pulls an item, like a banana, from a bag, and the child who correctly identifies it earns a point. The child with the most points wins the game (Frydrychova, 2013).

The most popular TPR game is "Simon Says" (traditional, nd). In this game, one child acts as Simon and gives instructions while prefacing them with "Simon says." For example, Simon might say, "Jump!" All children jump upon hearing "Simon says," and those who respond to instructions without "Simon says" are out of the game. This game encourages active listening and rapid response among children, making learning engaging and enjoyable (Frydrychova, 2013).

The analysis of physical hands-on activities particularly TPR, shows their effectiveness in making vocabulary learning interactive and engaging. These activities leverage movement and play, which are natural to children acquisition and retention.

Chapter V: Conclusions and Recommendations

Conclusions

Acquiring foreign language vocabulary is a fundamental step for learners, transforming initial understanding into practical use. Hands-on materials have proven particularly effective in engaging children and enhancing retention. The results of this study reinforce this idea, with the vast majority of teachers reporting positive outcomes when using these materials. This suggests that tactile learning tools are essential in early language education.

Remember, the emotional aspect of learning is equally important and should not be overlooked. Positive emotional experiences are more likely to be remembered, meaning a joyful and stimulating learning environment can significantly boost vocabulary acquisition. This aspect aligns with most of the theories and findings previously mentioned that highlight the significance of emotional engagement in deeper language processing. Therefore, fostering a collaborative atmosphere where teachers and students work together to create and utilize language learning materials is crucial. This approach makes learning more interactive and leverages the power of community and shared resources.

Furthermore, the utilization of manipulative materials can have a positive impact on the acquisition of English vocabulary for EFL students. Manipulative materials are physical objects that students can touch, move, and manipulate during learning. By using this approach, students actively engage in vocabulary practice, which can increase their motivation and improve their retention of words and concepts.

Thus, to effectively teach English vocabulary to EFL learners it is vital to use resources and manipulative materials. For instance, picture cards are valuable for linking words with visual representations and facilitating comprehension. Construction blocks and tiles facilitate the hands-on creation of vocabulary-related structures, fostering spatial understanding. Puzzles engage children in assembling images and words, reinforcing associations. Magnetic boards and letters enable students to construct and manipulate words and sentences, promoting interactive learning. Likewise, board games and matching cards offer playful opportunities to reinforce vocabulary through gameplay.

In summary, the intersection of tactile learning tools, emotional engagement, and collaborative teaching strategies forms a robust framework for effective language education. Additionally, it

is essential to recognize that the efficacy of manipulative materials can vary depending on individual student characteristics and teaching methodologies. For that reason, teachers are encouraged to adapt and select materials that best meet the needs and preferences of students, ensuring engaging and effective vocabulary instruction.

Recommendations

Teachers should incorporate hands-on materials into their lesson plans because manipulative tools such as picture cards, construction blocks, tiles, puzzles, magnetic boards, and board games effectively make learning interactive. These materials help students connect vocabulary with visual and tactile experiences, which improves retention and engagement. Additionally, establishing a positive and engaging learning environment is essential, as positive emotional experiences significantly improve vocabulary acquisition. In this regard, games and interactive exercises can be effective in fostering emotional engagement.

Additionally, it is crucial to customize materials to the specific needs of students, considering that the effectiveness of manipulative materials can vary based on each student's characteristics and learning style. For this purpose, teachers should be flexible and responsive, regularly assessing and adjusting their use of materials to ensure they meet the diverse needs of their students. Likewise, combining tactile learning tools with cognitive strategies is also beneficial. Incorporating repetition, visualization, and mnemonics alongside manipulative materials can enhance learning. Furthermore, integrating activities that align with the Affective Filter Hypothesis can help deepen emotional involvement and language processing.

Furthermore, ongoing professional development is essential for teachers. Staying updated with the latest research and best practices in language instruction will enable educators to refine their teaching strategies continuously. By doing so, they can effectively implement new materials and methods, ensuring a dynamic and effective vocabulary instruction environment for their students. Finally, future research should delve deeper into the role of emotions in learning and explore innovative ways to integrate these elements, ensuring that language acquisition is effective and enjoyable.

References

- Alape, A. (2013). *Descripción de Imágenes Fijas como Herramienta Didáctica*. Bogotá: Universidad Libre.
- Al-Yaseen, W. S. (2021). Teaching English to young children as an innovative practice: Kuwaiti public kindergarten teachers' beliefs. . *Cogent Education*, 8(1), 1930492. <https://doi.org/10.1080/2331186X.2021.1930492>.
- Aramburu, M. (2006). De la Percepción al Lenguaje. *Revista Iberoamericana de Educación* .
- Arias, I. (2011). Las Imágenes de Dibujos Animados en el desarrollo de la Habilidad Oral en Inglés. *Bogotá: Universidad Libre de Colombia*.
- Bekes, E. (2016). *Teaching English In Ecuador*. *EFL Magazine*. Obtenido de <https://www.eflmagazine.com/teaching-english-ecuador/>
- Berardo, S. (2006). *The Use of Authentic Materials in the Teaching of Reading*. *The Reading Matrix*, 6. Obtenido de https://www.researchgate.net/publication/237413136_The_Use_of_Authentic_Materials_in_the_Teaching_of_Reading
- Bruner, J. S. (1971). *The Relevance of Education*. New York: W.W. Norton and C. Inc.
- Bunting, L. a. (2021). Swedish teachers' views on the use of personalised learning technologies for teaching children reading in the English classroom. *International Journal of Child-Computer Interaction*, 27, 100236. <https://doi.org/10.1016/j.ijcci.2020.100236>.
- Cardona, M. (2019). *EL USO DE 'PICTURES' COMO ESTRATEGIA VISUAL PARA LA*. Cauco: Universidad de Cauco.

- Castellanos, O. (2007). *La Formación de Competencias Profesionales Específicas para la explotación Tecnológica en la Educación Técnica y Profesional*. Santiago de Cuba : Frank País García .
- Cerda, N. (2014). *Los Recursos Audiovisuales para la enseñanza del Inglés*. Ambato: Universidad Técnica de Ambato.
- Concannon-Gibney, T. (2021). "Teacher, Teacher, can't Catch Me!": Teaching Vocabulary and Grammar using Nursery Rhymes to Children for Whom English is an Additional Language. *The Reading Teacher*, 75(1), 41-50.
- Esquirol-Caussa, J., Sanchez-aldeguer, J., & Santamaria, I. (2017). A bibliographical review: The basis of our research. *Physiotherapy Updates*, 13, 33-36.
- Frydrychova, B. (2013). Teaching English to Pre-school Children. *Procedia. Social and Behavioral Sciences*, 93, 503-507. <https://doi.org/10.1016/j.sbspro.2013.09.228>.
Obtenido de <https://doi.org/10.1016/j.sbspro.2013.09.228>
- Gitahi, M. W. (2017). *The Effects of Manipulative Materials on Academic Performance in Language Activities Among Pre-school Children in Riruta Zone, Nairobi County*. Nairobi: University of Nairobi.
- Gonzales Pereira, M. (2018). *Aproximación Semiótica al Desarrollo del Lenguaje Infantil a Temprana Edad* . Santiago de Compostela: Vigo.
- Gonzales, D. (2000). Una Concepción Integradora del Aprendizaje Humano. *Revista Cubana de Psicología*, 17.
- Greenspan, S., & Shanker, S. (2004). The first idea. How symbols, language, and intelligence evolved from our primate ancestors to modern humans. . *Da Capo Press*.

- Hashemi, A. (2021). The effects of using games on teaching vocabulary in reading comprehension: A case of gifted students. *Journal for the Education of Gifted Young Scientists*, 9(2), 151-160.
<https://doi.org/10.17478/JEGYS.846480>.
- Huedo, F. (2013). Uso de Tecnologías para la enseñanza del Inglés . *Valencia: Valladolid*.
- Ibañez, N. (1999). *Cómo surge el lenguaje en el Niño. Los Postulados de Piaget, Vigotsky y Maturana*. Universidad Metropolitana de Ciencias de la Educación de Chile.
- Irfan, F. A. (2021). *Using Realia to Improve English Vocabulary at Primary Level*. Obtenido de Multicultural Education, 7(3), 340-354: <https://doi.org/10.5281/ZENODO.4647933>
- Keldgord, F., & Ching, Y.-H. (2022). *Teachers' Experiences with and Perceptions of Virtual Manipulatives Following the COVID-19 Pandemic*. Obtenido de TechTrends, 66(6), 957-967.: <https://doi.org/10.1007/s11528-022-00796-9>
- Kralova, Z. K. (2022). Positive emotional stimuli in teaching foreign language vocabulary. *System*, 104, 102678. <https://doi.org/10.1016/j.system.2021.102678>.
- Krashen. (1983). *Second Language Acquisition and Second Language Learning*. Burgos: Isabel Primera.
- Llorente, E. (2000). Las imágenes en la enseñanza. *Euskadi: Universidad del País Vasco*.
- Lund, E. &. (2016). Teaching Vocabulary to Preschool Children With Hearing Loss. *Exceptional Children*, 83(1), 26-41. <https://doi.org/10.1177/0014402916651848>.
- Madrid, D. (2001). Materiales Didácticos para la enseñanza del Inglés. *Granada:*.
- Magnussen, E. S., & Sukying, A. (2021). The Impact of Songs and TPR on Thai Preschoolers' Vocabulary Acquisition. *Thaitesol Journal*, 34(1).
- Martínez, J. (2020). *Revisión teórica sobre la Adquisición del Vocabulario en Educación Infantil*. España: Universidad de La Laguna. Obtenido de Wikipedia:

[https://es.wikipedia.org/wiki/Voz_\(m%C3%BAsica\)#Las_distintas_pr%C3%A1cticas_vocales](https://es.wikipedia.org/wiki/Voz_(m%C3%BAsica)#Las_distintas_pr%C3%A1cticas_vocales)

- Moll, L. (1978). *La Zona de Desarrollo Próximo de Vigotsky: Una Reconsideración de sus Implicaciones para la Enseñanza*. Arizona: Universidad de Arizona.
- Morocho, A. &. (2022). *Desarrollo del lenguaje Oral por medio de pictogramas*. Cuenca: Universidad Católica.
- Niño Jimenez, M. (2011). *Uso de imágenes Visuales como Recurso Didáctico* . Bogotá : La Gran Colombia.
- Orozs, A. (2018). *El Aprendizaje Activo para las Clases de Inglés*. Loja: UNAE.
- Otazu, A. (2012). *Las Imágenes como Recurso Didáctico para el aprendizaje del Idioma Inglés*. Huaraz: Universidad de UNASAM.
- Palacios, J. (2022). *Materiales didácticos para la enseñanza del Inglés*. Manabí: Universidad Técnica de Manabí.
- Pant, P., & Sharma, B. (2018). Bibliographical Research: With Special Reference to Law. *Legal Research Development: An International Refereed E-Journal I*, 2(3), 30-41.
- Perner, J. (1991). *Understanding the Representational Mind*. Massachussets: MIT.
- Piaget, J. (1977). *El Lenguaje y el Pensamiento en el Niño*. Buenos Aires: Guadalupe.
- Sánchez, G. (2009). *El Uso de la Imagen en la Escuela para la Expresión Oral y Escrita*. Xi'an: Suplementos.
- Siyanova-Chanturia, A., & Webb, S. (2016). Teaching Vocabulary in the EFL Context. *English Language Teaching Today, English Language Education 5*, DOI.
- Triana, M., Defaz, G., Sánchez, M., Jadán, P., & Jadán, K. (2016). El problema como base de aprendizaje significativo y desarrollo del pensamiento crítico. *Didasc@lia: Didáctica y educación*, 7(6), 277-2884.

- Vassiliou, A. &. (2012). *Cifras clave de la enseñanza de lenguas en los centros escolares de Europa 2012* . Obtenido de Agencia Ejecutiva en el ámbito Educativo Audiovisual y Cultural, 2012.: <https://sede.educacion.gob.es/publiventa/cifras-clave-de-la-ensenanza-de-lenguasen-los-centros-escolares-de-europa-2012/ensenanza-lenguas-union-europea/16089>
- Viera Torres, T. (2003). El Aprendizaje Verbal Significativo de Ausubel. *Universidades*, 37-43.
- Wallon, H. (1980). *De la Acción al Pensamiento*. Barcelona: Crítica.
- Wallon, H. (1980). *De la Acción al Pensamiento*. Barcelona: Critica.
- Zahorik, J. (1996). Elementary and Secondary Teachers' Reports of How They Make Learning. *The Elementary School Journal*, 96(5), 551-564.