



Faculty of Letters and Languages

Department of Foreign Languages

# MASTER DISSERTATION

Letters and Foreign Languages English language Sciences of the language

.-----

Submitted and Defended by:

Saouti Yasmine

# The Impact of Learning Styles on Vocabulary Learning The Case Study of 2nd Year Students of English at University of Biskra

Dissertation Submitted to the Department of Foreign Languages as Partial Fulfillment of the Requirements for the Degree of Master in Sciences of Language

# **Board of Examiners**

Mrs Bencharef Sakina Biskra President

Mr. Khaled AMRAOUI Biskra Supervisor

Dr Chenini Abdelhak Biskra Examiner

Academic year: 2024/2025

# **Declaration**

I, Saouti Yasmine, hereby declare that this thesis entitled
"The Impact of Learning Styles on Vocabulary Learning"
represents my original work and has not been previously submitted for any other degree or
qualification.

All sources consulted have been appropriately acknowledged through citations and references. Where collaborative work is included, I have clearly identified my individual contribution.

This research was conducted under the supervision of Mr. Khaled AMRAOUI at the university Mohamed Khaider- BISKRA between 2024 and 2025, in accordance with the university's ethical guidelines and academic integrity policies.

Certified,

Saouti Yasmine

Master's Student, Department of English Language

University of Biskra, Algeria

# acknowledgement

Completing this thesis has been an intellectual journey that would not have been possible without the guidance, support, and encouragement of many remarkable individuals to whom I owe my deepest gratitude.

First and foremost, I extend my sincerest appreciation to my esteemed supervisor, Mr. Khaled AMRAOUI, whose wisdom, patience, and unwavering belief in this work guided me through every stage of the research process. Your insightful critiques, scholarly rigor, and constant encouragement transformed challenges into opportunities for growth.

My profound gratitude goes to the dedicated faculty members of the english department, .

To the participating teachers and students who generously shared their time and experiences, this research truly belongs to you. Your stories and insights gave life to my data and purpose to my work.

Finally, I acknowledge the scholars whose groundbreaking work in linguistics laid the foundation for this research. Standing on the shoulders of these giants has been both an honor and a humbling experience.

While I have listed many names here, any shortcomings in this work are mine alone. This academic achievement represents not just individual effort but the collective support of an entire community to whom I will remain forever grateful.

Saouti Yasmine.

2024/2025.

# Dedication

To the ones who have shaped my heart and soul
To my mom, your love is my first home, your strength my guiding light. You
taught me kindness, resilience, and the beauty of unconditional love.
To my dad, your wisdom and quiet support have been my foundation. Your
belief in me gives me courage, and your laughter fills my world with warmth.
To my late beloved brother Saad Diaa Eddine, though you are no longer here,
your memory lives in every sunrise, every moment of joy, and every quiet
prayer. I carry you with me, always.

To my siblings, Nesrine and Rafik, my first friends and forever allies. No matter where life takes us, I am forever grateful to be bound to you by blood and unshakable love. Thank you for the laughter, the shared secrets, and the unbreakable bond we hold.

To my niblings, my little joys. Your laughter is magic, your hugs are healing, and watching you grow is one of my greatest blessings. May you always know how deeply you are loved.

To my best friends, my chosen family, you have walked beside me through every storm and celebration, you made my univesity journey enjoyable and unforgettable. Your loyalty is my shelter, your love my greatest gift.

This is for all of you, with all my love and gratitude.

Abstract

This thesis examines the connection between learning styles and vocabulary learning among

English as a Foreign Language (EFL) learners. It recognizes that students have different

preferences—visual, auditory, kinesthetic, and reading/writing. This study aims to identify

the most influential learning style(s) on EFL learners vocabulary learning, to analyze the

relationship between these learning styles and vocabulary learning outcomes, and to provide

recommendations for EFL teaching practices based on the findings. The research uses a

mixed-methods approach, combining quantitative data from student questionnaires with

qualitative insights from teacher interviews at Biskra University- Department of English, to

provide a complete view of teaching practices. The results show that auditory and visual

learning preferences are the most common, highlighting the need for varied and personalized

teaching strategies. Aligning teaching methods with students' preferred styles improves

vocabulary retention and engagement. The study recommends using different instructional

techniques and incorporating technology to create a more inclusive learning environment.

This research adds to the discussion on effective language teaching and offers practical

advice for educators to enhance vocabulary instruction in EFL settings.

**Key Terms:** Learning Styles, Vocabulary learning, English as a Foreign Language (EFL).

# List of Acronyms and Abbreviations

- AC: Abstract Conceptualization
- AE: Active Experimentation
- EFL: English as a Foreign Language
- LSs: Learning Styles
- LS: Learning Style
- MI: Multiple Intelligences
- VARK: Visual, Auditory, Reading/Writing, Kinesthetic
- TPR: Total Physical Response
- L1: First Language
- L2: Second Language
- CE: Concrete Experience
- RO: Reflective Observation
- AC: Abstract Conceptualization

# **List of Tables and Figures**

Table 1	20
Table 2	30
Figure 1 best ways to learn vocabulary	47
Figure 2 new words	48
Figure 3 helpful methods	49
Figure 4 ideal vocabulary lesson	50
Figure 5 word remembering	51
Figure 6 learning style	52
Figure 7 encountring new words	53
Figure 8 vocabulary learning strategy	54
Figure 9 vocabulary challenge	55
Figure 10 progress	56
Figure 11 useful vocabulary resources	57
Figure 12 ways to learn	58
Figure 13 LSs and vocabulary development	59
Figure 14 LSs and memory	60
Figure 15 varying LSs	61
Figure 16 adaption of vocabulary instruction	62
Figure 17 methods of instruction in EFL class	63
Figure 18 opposite learning style	64

# Content

Declaration	I
Acknowledgement	II
Dedication	III
Abstract	IV
List of Acronyms	V
List of Abbreviations	V
List of Tables and Figures	VI
Content	VIII
General Introduction	11
1. Study Background	11
2. Statement of the Problem	12
3. Research Questions	13
4. Research Hypotheses	13
5. Aims of the Study	13
6. Research Methodology	14
7. Population and sample	15
8. Sampling techniques	15
9. Significance of the study	15
10. Limitations	16
Chapter One: Learning Styles	17
Introduction	18
1.1.1. Brief Historical Background	18
1.1.2. Significance of Learning Styles	19

1.1.3. Learning Styles	19
1.1.3.1. Gardner's Multiple Intelligences Theory	20
1.1.3.2. Criticisms of Multiple Intelligences Theory	21
1.1.3.3. VARK Model	22
1.1.3.4. Criticism of VARK Model.	23
1.1.3.5. Kolb's Experiential Learning Theory	23
1.1.3.6. Criticism of Kolb's Theory	25
1.1.3.7. Honey & Mumford's Learning Styles Model	25
1.1.3.8. Criticism of Honey & Mumford's Model	37
Section Two: Vocabulary Learning	28
1.2.1.Vocabulary	28
1.2.2. Importance of Vocabulary	28
1.2.3. Taxonomies of Vocabulary Learning Strategies	29
1.2.4 Challenges in Vocabulary Learning.	31
1.2.5. Receptive Vocabulary and Productive Vocabulary	33
1.2.6.Factors Influencing Vocabulary Learning.	33
1.2.6.1. Internal Factors	34
1.2.6.2. External Factors	35
1.2.7. Integration of Learning Styles and Vocabulary Development	36
Conclusion	38
Chapter Two : field work	40
Section one : Methodology	41
Introduction	41
2.1.1. Research Approach	41
2.1.2. Research Design.	42

2.1.3. Population and Sample	42
2.1.4. Data Analysis and Procedures	43
2.1.5. Questionnaire	43
2.1.5.2 Aims of questionnaire	43
2.1.5.3. Description of the Questionnaire	43
2.1.5.3.1. Format & Structure	43
2.1.5.3.2. Design Rationale	44
2.1.6. Teachers Interview	45
2.1.7. Validity and Reliability	46
section two: Data Analysis and Results	47
section two: Data Analysis and Results	
	47
2.2.1Analysis of the Questionnaire	
2.2.1Analysis of the Questionnaire	
2.2.1 Analysis of the Questionnaire.  2.2.2. Interview Analysis.  2.3. Discussion of the Results.	
2.2.1Analysis of the Questionnaire  2.2.2. Interview Analysis  2.3. Discussion of the Results  Conclusion	
2.2.1 Analysis of the Questionnaire  2.2.2. Interview Analysis  2.3. Discussion of the Results  Conclusion  General Conclusion	

# **General Introduction**

# **Study Background**

Vocabulary learning is a critical aspect of language learning, especially for English as a Foreign Language (EFL) learners. As learners work to expand their vocabulary, various factors can influence the speed and efficiency with which they learn new words. One such factor is learning style—the individual preferences and tendencies that shape how learners approach and process information. Over the past few decades, there has been growing interest in the relationship between learning styles and vocabulary learning, as educators strive to work on their teaching strategies to better suit students' diverse needs.

Learning styles are typically categorized into visual, auditory, kinesthetic, and read/write preferences, each of which can affect how learners absorb and retain vocabulary. For instance, visual learners may benefit from images, flashcards, or videos to reinforce word meanings, while auditory learners might find success through listening exercises or word repetition. Kinesthetic learners, on the other hand, often prefer hands-on activities that allow them to physically engage with new words, such as role-playing or using gestures.

Despite the wide range of studies exploring the role of learning styles in language learning, there remains limited research specifically focusing on how these styles influence EFL learners' vocabulary learning. This gap is significant because understanding these dynamics could lead to more effective teaching methods, helping students not only retain vocabulary but also use it appropriately in context.

This study, therefore, aims to investigate the impact of different learning styles on EFL learners' vocabulary learning, providing insights that may inform language teaching strategies. By exploring the connection between how students learn and how they learn vocabulary, this

research seeks to contribute to the growing body of knowledge in the field of applied

linguistics.

**Statement of the Problem** 

In the context of English as a Foreign Language (EFL) learning, vocabulary learning plays an

important role in students' overall language proficiency. However, despite its importance,

many EFL learners struggle with effectively learning and retaining vocabulary. While

numerous factors influence vocabulary learning, one often overlooked aspect is the role of

learning styles. Learning styles refer to the different ways in which individuals prefer to

process and absorb information, and they can vary significantly from one learner to another.

These differences, however, are not always taken into account in traditional EFL instruction.

Current EFL pedagogy often employs a one-size-fits-all approach to vocabulary instruction,

despite substantial evidence of: (1) persistent learner difficulties with English orthography

and phonology, (2) significant gaps between receptive and productive vocabulary knowledge,

and (3) documented variations in learning effectiveness across instructional modalities. This

disconnect between teaching methods and learner preferences results in suboptimal

vocabulary learning outcomes.

This study seeks to address this gap by investigating the relationship between learning styles

and vocabulary development in EFL learners. By identifying which learning styles are most

conducive to vocabulary learning, the research aims to inform more targeted and adaptable

teaching methods that can improve students' vocabulary learning outcomes.

**Research Questions** 

This research seeks to answer the following research questions:

RQ1: What are the predominant learning styles among EFL learners?

RQ2: How does the diversity of learning styles affect vocabulary learning?

RQ3:What instructional strategies best accommodate diverse learning styles for optimal vocabulary retention?

# **Research Hypotheses**

Based on the above research questions, we propose the following research hypotheses:

RH1: The majority of EFL learners exhibit a predominant learning style, such as visual or auditory, as identified by a standardized learning style inventory (e.g., VARK).

RH2: The diversity of learning styles (visual, auditory, kinesthetic, and read/write) significantly influences vocabulary learning outcomes, with learners achieving better retention when instructional methods align with their preferred learning modalities compared to mismatched or uniform approaches.

RH3: a diverse approach to teaching vocabulary that incorporates multiple learning styles will result in higher overall vocabulary mastery compared to a one-size-fits-all method, as it engages students in ways that resonate with their personal learning prefrences

# Aims of the Study

This study aims:

- A) To identify the most influential learning style on EFL learners vocabulary learning.
- B) To analyze the relationship between these learning styles and vocabulary learning outcomes.
- C) To provide recommendations for EFL teaching practices based on the findings.

# Research Methodology

Research Approach

Mixed-methods approach: Combines the strengths of both quantitative and qualitative approaches, giving a more holistic understanding.

Research Design

A Mixed-Methods Design.

Data Collection Methods / Tools

- Questionnaires

- Interviews

Data Analysis and Procedures

For data analysis, quantitative data (e.g., learning styles and vocabulary test scores) has been

analyzed using descriptive statistics to identify predominant learning styles and inferential

statistics to explore relationships between learning styles and vocabulary performance.

Qualitative data (e.g., interview transcripts) has been analyzed using thematic analysis to

uncover strategies aligning with different learning styles.

For procedures, participants will complete a questionnaire and teachers an interview . Data

will be collected ethically, transcribed, organized, and securely stored for analysis.

a. First step: second-year students have been chosen randomly as participants for the

questionnaire.

b. Second step: Teachers have been randomly selected for the interview.

c. Third step: The gathered data has been analysed using thematic analysis for the teachers

interview and statistical analysis for the student questionnaire.

**Population & Sample** 

The population for this study consists of EFL students enrolled in language courses at the

department of English in the university of Mohamed Khider- Biskra. The sample is selected

using stratified sampling to include students with various learning styles. It includes

approximately twenty nine (29) students to provide a diverse prespective on vocabulary

development. Additionally, I will purposively select five (5) teachers who have experience working with these students to gain insights into their instructional strategies and the impact of different learning styles on vocabulary learning.

# **Sampling Techniques**

For this study, I picked a stratified sampling technique to ensure that EFL students with different learning styles are adequately represented. This approach allows for a comprehensive analysis of how each learning style impacts vocabulary learning. Additionally, I employed random sampling to select teachers in EFL instruction and have experience with diverse learning styles, providing valuable insights into the relationship between learner styles and vocabulary learning.

# Significance of the Study

This study explores how students' learning styles influence vocabulary learning in EFL settings, providing insights for customized teaching strategies. Its findings aim to enhance vocabulary learning, improving overall language proficiency for diverse learners.

# Limitations

This study has several limitations that should be acknowledged. First, the sample was restricted to intermediate-level EFL learners at a single institution, which may limit the generalizability of findings to other proficiency levels or educational contexts. Methodologically, the reliance on self-reported questionnaires introduces potential response bias, while the focus on short-term vocabulary retention necessitates future longitudinal investigations. Additionally, the study did not account for potentially influential external factors such as teacher expertise, cultural background, or classroom environment. Finally, the research was conducted in traditional classroom settings, leaving open questions about how

these findings might apply in technology-enhanced learning environments. These limitations suggest directions for future research while contextualizing the current study's contributions.

# chapter one : literature review

**SECTION ONE: Learning Styles** 

Introduction

This chapter provides an overview of the theoretical background concerning learning

styles and vocabulary learning in English as a Foreign Language (EFL) learners. It

explores how different learning preferences influence vocabulary learning and how

understanding these preferences can inform teaching strategies in EFL settings.

Recognizing learning styles is crucial in EFL because learners process and retain

information in various ways. Understanding these differences allows educators to tailor

instruction, enhancing engagement and vocabulary retention. Studies by Gardner

(1983) and Reid (1995) show that aligning teaching methods with students' learning

preferences can significantly improve language learning, including vocabulary

development.

This dissertation investigates how different learning styles impact vocabulary learning in

EFL learners. Specifically, it explores the question: How do learning styles influence the

learning and retention of vocabulary in EFL learners? By understanding these interactions.

the research aims to offer insights into more effective, individualized teaching methods

for vocabulary instruction in EFL classrooms.

1.1.1. brief historical backgrownd

The concept of learning styles (LSs) has evolved significantly over the years. In the

1970s, Keefe (1979) defined LSs as consistent, individualistic methods shaped by

cognitive, emotional, and psychological factors (as cited in Ellis, 1989). By the

1990s, Reid (1995) characterized LSs as habitual and preferred ways of absorbing and

processing information, suggesting they represent the most effective for learners (as cited

18

in Dörnyei, 2005). In the 2000s, Oxford (2001) simplified LSs to general approaches (e.g., auditory vs. visual) and introduced the idea that they operate on a continuum, indicating that learners may blend different styles (p. 3). This view was supported by Ehrman and Oxford (1995), who noted that individuals often exhibit a combination of styles (p. 69). Furthermore, Dörnyei and Skehan (2003) emphasized the adaptability of LSs, allowing learners to switch styles based on context (p. 602). However, Loo (1997) cautioned against assuming stability in LSs, highlighting their dynamic and context-dependent nature (as cited in Cassidy, 2004). Overall, the understanding of LSs has shifted from fixed definitions to a more flexible perspective that acknowledges the complexity of how learners engage with information.

# 1.1.2. significance of learning styles

The significance of learning styles (LSs) lies in their ability to enhance educational effectiveness by tailoring instruction to individual preferences. Recognizing LSs helps educators create personalized learning experiences, improving engagement, retention, and motivation. It allows for diverse teaching strategies, catering to visual, auditory, or kinesthetic learners, promoting inclusivity. Additionally, understanding one's LS fosters self-awareness, encouraging students to adopt strategies that work best for them. Ultimately, LSs contribute to more effective and flexible learning, facilitating better academic performance and lifelong learning skills.

# 1.1.3. learning styles

Learning styles may be defined in multiple ways, depending upon one's perspective. Brown (2000) defines learning styles as the manner in which individuals perceive and process information in learning situations. He argues that learning style preference is one aspect of learning styles, and refers to the choice of one learning situation or condition over another. Celcia-Murcia (2001) defines learning styles as the general approaches—for

example, global or analytic, auditory or visual—that students use in acquiring a new language or learning any other subject. The manner in which a learner perceives, interacts with, and responds to the learning environment. Learning style is sometimes defined as the characteristic cognitive, affective, social, and physiological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (MacKeracher, 2004, p. 71

# 1.1.3.1. Gardner's Multiple Intelligences Theory:

The theory of multiple intelligences, developed by renowned psychologist Howard Gardner over 30 years ago, has had a significant impact on educators worldwide, inspiring them to explore more effective teaching methods. In 1983, Gardner revolutionized the education field with his book Frames of Mind: The Theory of Multiple Intelligences. In it, he introduced a new perspective on human intelligence, challenging the conventional belief that intelligence could only be measured through standardized tests (Strauss, 2013).

Intelligence Type	Description
Linguistic	People with strong linguistic skills can use their native language, and sometimes other languages, to understand people and express their thoughts. Examples of professionals with above average intelligence levels in this area include writers and orators.
Logical-Mathematical	Scientists are examples of people strong in the logical-mathematical intelligence because they can manipulate numbers the way mathematicians do. They tend to have above average logical-mathematical skills also because of their knowledge of causal systems.
Spatial	Spatial intelligence involves the skills people have to represent the spatial world. Spatially intelligent people tend to become painters, sculptors, and architects. Spatial intelligence is used more often in certain sciences like anatomy and topology.
Bodily-Kinesthetic	This intelligence relates to the ability to use whole or certain body parts to create something, solve a problem, or display skills involving bodily movement at an event.

	Examples of professionals strong in this intelligence include athletes and dancers.	
Musical	People with enhanced musical intelligence have a heightened ability to hear, recognize, and remember patterns. They think in music and cannot get it out of their minds. In 'Frames of Mind', Gardner indicated that musical intelligence emerges earlier than other intelligences.	
Interpersonal	The interpersonal intelligence involves one's ability to understand others. People strong in this intelligence can detect other people's moods, intentions, and desires. This intelligence is especially important for individuals who deal frequently with people like teachers, clinicians, and salespeople.	
Intrapersonal	An enhanced understanding of oneself is a characteristic of someone strong in the intrapersonal intelligence. A developed intrapersonal intelligence enables people to anticipate how they would react to experiences and how to choose the experiences that can be beneficial.	
Naturalist	The naturalist intelligence was added to the original seven. It relates to an individual's ability to differentiate among living things. People strong in this intelligence are good at classifying plants, minerals, and animals as well as rocks and grass.	

# 1.1.3.2. Criticisms of Multiple Intelligences Theory

MI theory has received significant attention but also criticism. Gardner addressed some critiques in Frames of Mind, including the claim that MI theory lacks empirical support. Gardner and Moran (2006) argued that Waterhouse misunderstood the theory and that it is firmly grounded in empirical findings.

A common criticism is the use of "intelligence" instead of "talent," especially for abilities like dancing. Gardner responded that a narrow definition of intelligence would devalue other abilities. Another objection concerns the correlation between different intelligences. Gardner questioned these correlations, noting that most tests focus on logical and linguistic skills, which may not reflect a person's true abilities in other areas (Gardner, 2011b).

Finally, some critics equate intelligences with styles, like learning or working styles. However, Gardner distinguished between the two, noting that intelligences are content-specific, while styles remain constant across content (Gardner, 2011b).

# 1.1.3.3. vark model

The VARK model is a widely recognized framework that categorizes learners according to their preferred sensory modalities for receiving and processing information. Developed by Neil Fleming in the late 1980s, VARK stands for Visual, Auditory, Reading/Writing, and Kinesthetic. The model proposes that individuals have distinct preferences for how they absorb and interact with information, and understanding these preferences can help educators tailor their teaching methods for improved learning outcomes (Fleming & Mills, 1992).

# 1. Visual learning

Visual learning involves learning by seeing. This mode of learning uses visual cues such as infographics, graphs, illustrations, videos, diagrams, and flowcharts – anything that primarily stimulates your learners' eyes. Techniques such as color coding information, using different fonts, and labeling important points with stickers are all a part of visual learning.

# 2. Auditory learning

Auditory learning focuses on training learners via audio inputs. Auditory learning can be incorporated into a training program via podcasts, face-to-face learning, group discussions, interviews, and audiobooks.

## 3. Reading & writing learning

As the name suggests, reading and writing learning mode involves learning via written or printed medium. This type of learning is the most traditional of the four and may be included as a part of text-based training content. Books, eBooks, documents, PDFs, and written tests are common ways to include the reading and writing learning mode in a training program.

# 4. Kinesthetic learning

The kinesthetic learning style involves learning through activity. This learning mode may be incorporated into training in the form of an on-site visit, a product demo, or a multimedia slide-deck presentation. The kinesthetic mode is usually used with other learning modes, such as visual and auditory, to provide an in-depth learning experience.

# **1.1.3.4.** Criticism

Lack of Empirical Evidence: Critics argue that there is insufficient scientific evidence to support the idea that tailoring teaching to students' learning styles improves learning outcomes. Research has shown that, while students may have preferences, there is little to no significant evidence that matching teaching methods to those preferences enhances learning (Pashler et al., 2008).

Oversimplification of Learning Preferences: The VARK model simplifies learning into just four categories, which critics feel doesn't capture the complexity of how people learn. Human learning is a multifaceted process, and many factors, such as motivation and cognitive load, influence how a person absorbs information.

Static Nature of Learning Styles: The VARK model assumes that learning preferences are relatively stable over time, but some researchers argue that these preferences can change depending on context, subject matter, or personal growth. This calls into question the practicality of always categorizing learners into fixed groups.

Risk of Labeling: Some educators worry that classifying students into fixed learning styles might lead to labeling them too rigidly. This could inadvertently limit students' opportunities to engage with other learning modes that they may find useful or enjoyable, potentially leading to a self-fulfilling prophecy where students avoid certain learning experiences.

# 1.1.3.4. Kolb's Experiential Learning Theory

Experiential Learning Theory, developed by psychologist David Kolb in 1984, focuses on learning through hands-on experience. The theory suggests that knowledge is formed through

the process of experiencing and reflecting. Kolb outlines a four-stage cycle consisting of concrete experience, reflective observation, abstract conceptualization, and active experimentation, which together facilitate effective learning. Applying this theory offers advantages for students, educators, and employers alike.

Kolb outlines a cyclical model of learning that consists of four stages:

Concrete Experience (CE): This is the stage where the learner actively experiences an activity or event. It involves hands-on engagement and real-world involvement, where learning is based on direct experience.

Reflective Observation (RO): After experiencing the event, the learner reflects on it. They observe the experience from different perspectives, considering what happened, how it felt, and what can be learned from it.

Abstract Conceptualization (AC): In this stage, the learner develops theories, ideas, or concepts based on their reflections. They try to make sense of the experience by forming new understandings, drawing conclusions, or applying logical analysis.

Active Experimentation (AE): The learner tests the newly formed concepts and ideas in real-world situations, actively experimenting and applying their learning to see how it works in practice.

Kolb suggests that individuals have distinct preferences for how they approach the learning cycle, which can be categorized into four learning styles based on the stages: Diverging, Assimilating, Converging, and Accommodating.

Diverging: Learners who prefer concrete experiences and reflective observation. They are imaginative and view situations from many perspectives.

Assimilating: Learners who prefer reflective observation and abstract conceptualization. They excel at understanding and organizing information in a logical way.

Converging: Learners who prefer abstract conceptualization and active experimentation. They are good at problem-solving and applying ideas in practical ways.

Accommodating: Learners who prefer concrete experiences and active experimentation. They are hands-on learners who enjoy trial and error.

Kolb's theory emphasizes that effective learning involves moving through all stages of the cycle, and learners can benefit from engaging in activities that develop their less dominant learning preferences (Kolb, 1984).

# **1.1.3.5.** Criticism

Kolb's Experiential Learning Theory has been widely influential but faces several criticisms. First, it lacks empirical support, as research has not consistently validated the claim that learners progress through all four stages of the learning cycle (Gentry, 1990). Second, the model's classification of learners into four types oversimplifies learning, failing to account for the dynamic nature of individual learning preferences (Beard & Wilson, 2006). Third, the model is criticized for cultural bias, as it reflects Western educational values and may not be applicable to non-Western cultures where collective learning is prioritized (Li, 2011). Additionally, the rigid cyclical structure of the model is seen as too inflexible, as learning doesn't always follow a fixed sequence (Jarvis, 2006). Lastly, the theory is criticized for its lack of clarity regarding key concepts like "experience" and "learning," with some arguing that it doesn't sufficiently explain how experience is transformed into knowledge (Miettinen, 2000).

# 1.1.3.6. Honey and Mumford's Learning Styles model

Honey & Mumford's Learning Styles model, developed in the 1980s, categorizes learners into four distinct types based on how they prefer to approach learning situations. These styles—Activists, Reflectors, Theorists, and Pragmatists—are grounded in experiential learning theory, which emphasizes learning through experience, reflection, and application.

### 1. Activists

Activists are individuals who learn best by doing, thriving in hands-on experiences and actively participating in learning activities. They enjoy new and exciting challenges, prefer working with others in group settings, and often take risks while solving problems on the go. Enthusiastic, energetic, and open to new ideas, activists typically adopt a trial-and-error approach to learning but may sometimes neglect the need for reflection or deeper analysis (Honey & Mumford, 1986). Their strengths include high adaptability, the ability to think on their feet, and bringing energy and enthusiasm to team environments, which allows them to make quick decisions. However, they may overlook details, fail to fully consider potential risks, and struggle with prolonged reflection or critical analysis of their experiences.

# 2. Reflectors

Reflectors learn best by observing and thoughtfully analyzing past experiences before taking action. They prefer to take their time to consider all aspects of a situation, which enables them to make informed decisions. Typically engaging in careful observation, reflectors consider alternative perspectives and weigh the pros and cons before reaching conclusions (Honey & Mumford, 1986). Their characteristics include a preference for observing before participating, enjoying the process of pondering over experiences, and adopting a measured, cautious approach to learning, which leads to thorough analysis. Their strengths lie in understanding situations from multiple viewpoints, making careful and thoughtful decisions, and learning deeply through reflection. However, reflectors may struggle with quick decision-making, risk overthinking to the point of analysis paralysis, and often avoid taking immediate action.

# 3. Theorists

Theorists prefer to engage in logical analysis and conceptual thinking, learning best by understanding the underlying theories, principles, and frameworks that inform an experience.

They enjoy exploring abstract concepts, creating models, and seeking logical coherence in ideas, typically excelling in situations that require critical thinking and synthesis of complex information (Honey & Mumford, 1986). Their characteristics include a focus on theories, models, and principles, a desire to understand the "why" behind their learning, and an inclination to challenge ideas and test their own assumptions. Theorists possess strong analytical and problem-solving skills, are adept at integrating diverse information into structured models, and excel in situations that demand critical thinking and theoretical understanding. However, they may struggle with the practical application of abstract concepts, can become too focused on theory while neglecting experiential or hands-on learning, and sometimes appear overly critical or dismissive of ideas that lack logical structure.

# 4. Pragmatists

Pragmatists learn best when they can apply new ideas or concepts in practical, real-world settings. Action-oriented by nature, they prefer to experiment with theories to determine their effectiveness in practice, often valuing practical outcomes and quickly seeking real-world applications of what they learn (Honey & Mumford, 1986). Their characteristics include a preference for hands-on, practical experiences, a focus on applying ideas to solve real-world problems, and a tendency to adopt a "trial and error" approach to learning. Pragmatists are highly effective in problem-solving situations that require practical application, adept at adapting theory to real-world contexts, and willing to experiment with new approaches. However, they may overlook theoretical or conceptual aspects of a problem, can become impatient with ideas that seem impractical, and may lack the depth of understanding that comes from reflection or theoretical exploration.

# **1.1.3.7.** Criticisim

While the Honey & Mumford model has been influential in the field of learning styles, it has faced critiques similar to other learning style models. Some argue that there is limited

empirical evidence supporting the effectiveness of tailoring instruction to specific learning styles (Pashler et al., 2009). However, the model's value lies in its ability to provide a framework for understanding the diverse ways in which people approach learning and knowledge processing.

# **SECTION TWO: Vocabulary Learning**

# 1.2.1. Vocabulary

Vocabulary, according to Hornby (2000), is "a list of words in a language with their meaning" (as cited in Dib, 2017, p. 98). Hence, the main composition of vocabulary is words. Likewise, Robinson (2000) asserted that "vocabulary is concerned with individual words and their particular meanings" (p. 42). Therefore, vocabulary is one of the most important aspects of language use. It is the main composition of written and spoken speech through which learners communicate and express their thoughts.

Thornbury (2002) suggested a wider composition of vocabulary than merely single words; he defined vocabulary as "a collection of items" (p. 14). The word items may refer to single words or other kinds of language items such as collocations. Scrivener (2005) asserted that vocabulary includes single words as well as combinations of two or three words such as phrasal verbs (p.227). Therefore, vocabulary is composed of words and two or three joint words that carry meaning (s). On a larger scale, Scrivener (2005) asserted that lexis refers to vocabulary items, collocations and lexical items (ready-made chunks) which include content words only (e.g., someone you can ask for advice) (p. 227).

# 1.2.2. importance of vocabulary

Effective communication, whether in written or spoken form, largely depends on a strong vocabulary. A broad vocabulary base allows learners to both comprehend and express themselves in a foreign language, aiding in the mastery of language skills. Thornbury (2002)

emphasized that "you can say very little with grammar, but you can say almost anything with words" (p. 13), highlighting the critical role vocabulary plays in communication. Furthermore, Nation and Coady (1988) suggested that vocabulary is a key factor in determining readability (as cited in Nation, 1990, p. 116). Additionally, Oxford and Crookall (1990) pointed out that vocabulary is essential for achieving language proficiency (p. 25). Therefore, mastering a foreign language is impossible without acquiring a sufficient vocabulary.

# 1.2.3. Taxonomies of Vocabulary Learning Strategies

Understanding vocabulary is crucial for effective communication in a foreign language (Seal, 1991). It plays a significant role in both speaking and comprehension. To truly know a word, one must grasp:

Its frequency of use and any syntactic or situational restrictions.

Its base form and any derivatives.

The network of meanings associated with it.

Additionally, knowing a word involves recognizing its spelling, pronunciation, common collocations (the words it often pairs with), and its appropriateness in context (Nation, 1990). This makes lexical competence much broader than simply being able to define a set number of words; it encompasses a wide range of knowledge and requires various strategies for acquisition. Foreign language learners (FLLs) employ different tactics to develop their vocabulary. Consequently, researchers have sought to classify these vocabulary learning strategies. Notable taxonomies include those by Gu and Johnson (1996), Schmitt (1997), and Nation (2001), summarized below.

Gu and Johnson (1996) categorize second language (L2) vocabulary learning strategies into four main types: metacognitive, cognitive, memory, and activation strategies. Metacognitive strategies include selective attention and self-initiation. Learners using selective attention focus on words essential for understanding a text, while those employing self-initiation find

ways to clarify the meanings of vocabulary items. Cognitive strategies involve guessing meanings, effectively using dictionaries, and taking notes. For instance, learners may guess a word's meaning using context clues or their background knowledge. Memory strategies are divided into rehearsal and encoding. Rehearsal might involve using word lists or repetition, whereas encoding encompasses techniques like association, imagery, and analyzing word structure. Activation strategies encourage learners to use new vocabulary in various contexts, such as constructing sentences with recently learned words. All these suggested strategies can be summarized in a table as follows:

Metacognative	Cognative	Memory	Activation
* Selective Attention: Identifying essential words for comprehension * Self-initiation: Using a variety of means to make the meaning of words clear	* Guessing: Activating background knowledge, using linguistic items * Use of dictionaries * Note-taking	Rehearsal: Word lists, repetition, etc. * Encoding: Association (imagery, visual, auditory, etc.)	* Using new words in different contexts

table 2

Schmitt (1997) expands on these ideas, creating a comprehensive inventory of vocabulary learning strategies. He distinguishes between strategies for discovering the meanings of new words and those for consolidating that knowledge. The former includes determination and social strategies, while the latter involves cognitive, metacognitive, memory, and social strategies. Determination strategies help learners figure out a word's meaning independently, using context or structural knowledge. Social strategies might involve asking someone for assistance. To reinforce vocabulary, learners can engage in cooperative group activities,

which exemplify social strategies for practicing new words. Memory strategies, often referred to as mnemonics, relate new words to previously learned information through imagery or grouping. Cognitive strategies are similar but focus more on repetition and mechanical study methods like flashcards or vocabulary notebooks. Finally, metacognitive strategies allow learners to monitor and evaluate their progress, such as through self-testing.

Nation (2001) also proposes a taxonomy of vocabulary learning strategies, dividing them into three main categories: planning, source, and processes. Planning involves decisions about where, how, and how often to focus on vocabulary items. This includes selecting words and aspects of word knowledge, as well as planning for repetition. The source category pertains to how learners gather information about words, whether from the word itself, its context, or reference materials like dictionaries. The processes category includes strategies for establishing word knowledge through noticing, retrieving, and generating. Noticing involves recognizing the word to be learned, which can include writing it down or repeating it. Retrieval refers to recalling previously learned items, while generating includes attaching new knowledge to what is already known through techniques like visualizing examples, semantic mapping, and creating sentences with the new word.

Overall, while these taxonomies may differ slightly in their classifications, they all offer valuable vocabulary learning strategies. Given that teachers often can't cover every word in class, equipping students with these strategies empowers them to tackle unfamiliar vocabulary independently, enhancing their access to a broader range of words in the target language.

# 1.2.4. Challenges in Vocabulary Learning

Identifying the challenges students face is a crucial first step in effectively teaching vocabulary. Thornbury (2004: 27) outlines several factors that can make certain words more difficult to learn.

Pronunciation is a significant hurdle; research indicates that words that are hard to pronounce tend to be more challenging for learners to acquire.

Spelling also poses challenges, especially when there are mismatches between sounds and letters. English spelling has many irregularities, and words with silent letters—such as foreign, listen, and muscle—can be particularly problematic.

Regarding length and complexity, longer words are not necessarily harder to learn than shorter ones, but high-frequency words tend to be shorter. This means learners are likely to encounter them more often, aiding in retention. Grammarassociated with certain words can complicate matters, especially when it differs from the learner's native language (L1). For example, remembering whether verbs like enjoy, love, or hope are followed by an infinitive (e.g., to swim) or a gerund (e.g., swimming) can add to the difficulty.

Meaning can also create confusion when words overlap in definition. For instance, the verbs make and do can be tricky: you make breakfast but do the housework. Moreover, words that can be used in a variety of contexts are often perceived as easier than their more specific synonyms. For example, "put" is a versatile verb compared to "impose" or "place." Similarly, "thin" is generally seen as simpler than "skinny," "slim," or "slender."

Connotation is another factor; uncertainty about a word's implications can lead to misunderstandings. For example, "propaganda" carries negative connotations in English, whereas its equivalent in another language might simply mean "publicity." On the other hand, "eccentric" is neutral in English, but its closest translation in some languages could imply "deviant."

Finally, idiomatic expressions (like "make up your mind" or "keep an eye on") are usually more challenging than straightforward words with clear meanings, such as "decide" or "watch." These complexities highlight the multifaceted nature of vocabulary acquisition and the various strategies learners must employ to navigate them successfully.

# 1.2.5. Receptive Vocabulary and Productive Vocabulary

Receptive vocabulary, also known as passive vocabulary, refers to the ability to recognize that a specific form corresponds to a particular meaning (Nation, 1990, p. 5). This means that learners can identify a word when they see or hear it, which is essential for understanding spoken language and reading texts. Bauer and Nation (1993) noted that if a learner knows at least one word from a word family, they might be able to recognize other words in that family (Schmitt, 2010, p. 192).

On the other hand, productive vocabulary, or active vocabulary, involves the ability to produce spoken or written language by retrieving knowledge that has already been acquired. This type of vocabulary encompasses receptive vocabulary, along with an understanding of how to use words appropriately (Nation, 1990, p. 5). Nation (2000) associates receptive vocabulary with listening and reading skills, while productive vocabulary relates to speaking and writing.

Schmitt (2010) highlights that receptive vocabulary typically develops before productive vocabulary, although there may be exceptions for specific words (p. 21). This suggests that learners often have a greater knowledge of receptive vocabulary compared to productive vocabulary (Milton, 2009, p. 13). Furthermore, studies comparing test scores for receptive and productive vocabulary consistently show that receptive vocabulary scores are generally higher (e.g., Laufer, 2005, as cited in Schmitt, 2010, p. 22; Waring, 1997, as cited in Nation, 2000, p. 593). Additionally, Kamil and Hiebert (2005) argued that receptive vocabulary enables learners to produce vocabulary effectively (p. 3).

# 1.2.6. Factors Influencing Vocabulary learning

Vocabulary learning is a crucial component of language development, influenced by various factors that affect how quickly and thoroughly individuals learn new words. These factors can be divided into internal and external influences. Internal factors relate to the learner's

personal traits, such as age, motivation, and cognitive abilities, while external factors involve the learning environment, teaching methods, and social context.

# 1.2.6.1.Internal Factors

### 1. Age

The ability to learn vocabulary changes throughout a person's life. Young children benefit from increased neuroplasticity, enabling them to learn new words rapidly and effectively (Snow, 2010). As they encounter language in diverse situations, they quickly absorb vocabulary. In contrast, adults may find vocabulary learning slower due to cognitive changes; however, they often employ more advanced strategies, like mnemonic devices and semantic mapping, which can help offset the slower pace of learning (Pakulak & Neville, 2010). Research shows that the decline in vocabulary learning associated with age is less significant for those who remain engaged in language-rich environments (Schneider et al., 2019).

# 2. Motivation

Motivation plays a vital role in vocabulary learning. According to the Self-Determination Theory (Deci & Ryan, 1985), intrinsic motivation, driven by personal interest or enjoyment in learning, leads to greater effort and commitment. On the other hand, extrinsic motivation, which is influenced by external rewards or goals, can also aid vocabulary acquisition, although its effects may not last as long. Learners with intrinsic motivation tend to delve deeper into vocabulary learning, resulting in better retention (Gardner, 2006).

# 3. Cognitive Abilities

Variations in cognitive abilities, especially memory and processing speed, significantly impact vocabulary learning. Learners with higher working memory capacity generally excel in storing and recalling new words (Baddeley, 1992). Additionally, those with faster cognitive processing can efficiently understand and use new vocabulary in context (Kidd, 2012). Thus, cognitive abilities influence both the speed and quality of vocabulary learning.

# 4. Linguistic Background

A learner's first language or multilingualism can affect how they learn vocabulary in a second language (L2). Individuals with an extensive vocabulary in their native language(s) are often better positioned to learn vocabulary in a second language, using cognates, grammatical structures, and word associations to their advantage (Bialystok, 2001). Furthermore, bilingual learners may benefit cognitively from their ability to switch between languages and conceptualize words in various contexts (Cummins, 2000).

### 1.2.6.2. External Factors

# 1. Teaching Methods

The strategies employed to teach vocabulary greatly influence the speed and effectiveness of learning. Explicit instruction—where teachers provide definitions, example sentences, and contextual usage—is particularly effective, especially when paired with interactive activities (Nation, 2001). Implicit learning, such as acquiring vocabulary incidentally through reading, listening, and conversation, can complement explicit methods and enhance long-term retention by allowing learners to encounter vocabulary in context (Krashen, 1989). A combination of these approaches often results in stronger vocabulary learning.

# 2. Learning Environment

The social and linguistic environment is crucial for vocabulary learning. Learners in rich language environments, whether through formal education or informal interactions, tend to develop a larger vocabulary. Exposure to language through media, books, conversations, and immersion offers the repeated encounters necessary for word retention (Snow, 2010). Social interactions with fluent speakers provide valuable opportunities for learners to practice vocabulary in real-life situations, improving their ability to recall and use words correctly.

# 3. Cultural Context

Vocabulary is often closely linked to cultural norms and experiences, so understanding the

cultural background of a language is essential for mastering its vocabulary (Byram, 1997). Certain expressions or words may carry specific meanings that are only fully comprehensible with cultural knowledge. Learners who immerse themselves in the cultural context of a language are more likely to gain a deeper understanding of its vocabulary and its appropriate usage.

# 4. Technological Tools

The advent of digital tools has broadened opportunities for vocabulary learning. Language learning apps like Duolingo and Memrise offer engaging, personalized activities and often use techniques like spaced repetition to reinforce vocabulary (Tharp, 2017). Online communities and resources, including language exchange platforms, facilitate interaction with native speakers, allowing learners to learn vocabulary in authentic contexts. These tools provide flexible and accessible learning options, particularly for those without formal language education.

### 5. Socioeconomic Factors

Socioeconomic status (SES) can affect vocabulary learning by influencing access to educational resources and opportunities. Learners from higher SES backgrounds often encounter a broader vocabulary through books, travel, and extracurricular activities, contributing to a richer vocabulary base (Hart & Risley, 1995). Conversely, those from lower SES backgrounds may have limited exposure, potentially hindering their vocabulary acquisition. Additionally, parental involvement in language-rich activities, like reading to children, can significantly impact vocabulary development in early childhood.

# 1.2.7. Integration of Learning Styles and Vocabulary Development

The integration of learning styles into vocabulary development can significantly enhance the effectiveness of language learning. Recognizing that individuals have distinct preferences for how they learn—whether visual, auditory, kinesthetic, or a combination of these—educators

can tailor vocabulary instruction to meet diverse needs. This approach is supported by research indicating that aligning teaching methods with students' learning preferences can lead to improved learning outcomes (Padidar, Tayebi, & Shakarami, 2015).

Visual learners benefit from graphic organizers, flashcards, and images. Incorporating visual aids can help these learners associate new vocabulary with images, enhancing recall and understanding. For example, using word maps or infographics can visually link new words with their meanings and contexts, which is crucial since visual learning strategies have been shown to facilitate better retention of vocabulary (Padidar et al., 2015).

Auditory learners excel through listening and speaking. To support vocabulary development, educators can use songs, rhymes, and auditory storytelling. Engaging these learners in discussions, podcasts, or interactive listening activities allows them to hear vocabulary in context, reinforcing their understanding and retention. Research suggests that auditory methods can enhance vocabulary acquisition by providing learners with contextualized language experiences (Padidar et al., 2015).

Kinesthetic learners thrive through hands-on activities. Integrating movement into vocabulary learning, such as acting out words or using physical objects to represent concepts, can be particularly effective. Games that involve movement or tactile experiences can make vocabulary learning dynamic and memorable for these learners. Studies indicate that kinesthetic activities can lead to higher engagement and retention rates among learners who prefer this style (Padidar et al., 2015).

Combining various learning styles can address the needs of all learners in a classroom. For instance, a vocabulary lesson might include a video (visual), a group discussion (auditory), and a role-playing activity (kinesthetic). This multimodal approach not only engages students but also reinforces vocabulary through multiple channels, enhancing retention and application.

Research supports the effectiveness of multimodal learning environments in promoting vocabulary development (Padidar et al., 2015).

In addition to the traditional visual, auditory, and kinesthetic (VAK) model, other theories, such as Gardner's Multiple Intelligences and Kolb's Experiential Learning Theory, offer additional frameworks for understanding how students learn. Gardner's theory identifies various intelligences, including linguistic, logical-mathematical, and interpersonal, suggesting that vocabulary development can be enhanced by tailoring activities to these intelligences. For instance, linguistic learners may benefit from word games and poetry, while interpersonal learners might thrive in collaborative vocabulary exercises (Gardner, 1983).

Kolb's model emphasizes experiential learning, where students learn through reflection on doing. This approach can be integrated into vocabulary development by encouraging learners to engage in real-world conversations and reflect on their usage of new words, thereby deepening their understanding and retention (Kolb, 1984).

# **Conclusion**

This chapter has provided a comprehensive exploration of learning styles and their influence on vocabulary learning in English as a Foreign Language (EFL) learners. Understanding the diverse ways individuals prefer to learn—whether through visual, auditory, or kinesthetic methods—can significantly enhance teaching strategies, leading to improved vocabulary retention and overall language proficiency.

The historical evolution of learning styles, from Keefe's foundational definitions to Gardner's Multiple Intelligences and the VARK model, illustrates the complexity and adaptability of how learners engage with information. Recognizing that learning styles are not fixed but can change based on context allows educators to create more responsive and inclusive learning

environments. This adaptability is crucial for addressing the varied needs of EFL learners, fostering self-awareness and encouraging the adoption of effective learning strategies.

While the importance of vocabulary as a fundamental component of language learning cannot be overstated, learners face several challenges in vocabulary learning. Difficulties such as pronunciation, spelling irregularities, and the nuances of word meanings can hinder progress. The distinction between receptive and productive vocabulary further complicates the learning process, as learners often have a stronger grasp of recognized words than those they can actively produce.

Moreover, factors like age, motivation, cognitive abilities, teaching methods, and the learning environment all play significant roles in vocabulary acquisition. Understanding these challenges is essential for educators seeking to implement effective vocabulary instruction. By addressing these difficulties and employing targeted strategies, such as explicit teaching of vocabulary and the use of engaging, multimodal approaches, educators can better support learners in overcoming obstacles.

In summary, recognizing and leveraging learning styles in vocabulary learning, while also being mindful of the inherent challenges, can lead to more personalized, engaging, and effective learning experiences for EFL learners. The insights gained from this investigation underscore the necessity for educators to remain attuned to individual learning preferences and the difficulties faced, ultimately fostering greater success in vocabulary learning and language proficiency.

# chapter two: field work

**SECTION ONE: METHODOLOGY** 

Introduction

The second chapter of this research is the practical section of the study; it provides the field

work conducted by the researcher. This chapter presents the research methodology used in

this study to properly discuss the impact of learning styles on vocabulary learning the case

study of second-year license students in linguistics at Mohamed Khider University. This

chapter further discusses the sample and data gathering tools, then explains the gathering tool

and process of implementation in detail. Moreover, this chapter details the findings and

analysis of the results.

This chapter tested the hypothesis previously set by this study, which presumed that:

→ RH1: Most EFL learners prefer a dominant learning style (e.g., visual or auditory), as

confirmed by a standardized assessment like the VARK questionnaire.

→ RH2: Vocabulary instruction tailored to diverse learning styles leads to greater mastery

than uniform methods, as it aligns with students' individual preferences.

→ RH3: Visual learning is predicted to be the most effective for vocabulary retention, as

associating words with images enhances memorization.

By testing the validity of the hypothesis, this section investigated the impact of learning

styles on vocabulary learning on EFL learners in the selected sample and achieved its aims.

2.1.1 Research Approach

This study takes an exploratory approach to investigate how learning styles influence

vocabulary learning among EFL learners. Moving beyond simple identification of challenges,

the research actively seeks to develop actionable solutions to enhance vocabulary instruction.

The mixed-methods design combines quantitative data from student questionnaires with

qualitative insights from teacher interviews, providing both statistical patterns and in-depth

41

contextual understanding. The questionnaire yields measurable data on learning preferences and difficulties, while the interviews offer nuanced perspectives from educators about practical classroom experiences. Together, these methods create a comprehensive picture of how learning styles affect vocabulary development in Algerian EFL contexts, with particular focus on university-level instruction.

# 2.1.2 Research Design

This study adopts a descriptive case study methodology to systematically examine the challenges and difficulties encountered by EFL learners in relation to the influence of learning styles on vocabulary acquisition. The research design is structured to provide a comprehensive investigation of this phenomenon through two principal chapters. The initial chapter is divided into two distinct yet interrelated sections, each dedicated to an in-depth exploration of one of the core variables under investigation. The subsequent chapter presents the methodological framework, including research instruments, data analysis procedures, and findings presentation.

This structured approach facilitates a thorough examination of the complex relationship between individual learning preferences and vocabulary learning outcomes within EFL contexts, while maintaining methodological transparency and academic rigor. The case study design is particularly appropriate for this investigation as it allows for rich, contextualized understanding of the challenges faced by learners, while providing valuable insights for pedagogical practice and future research in this domain

# 2.1.3. Population and sample

The population for this study consists of L2 EFL students enrolled in language courses at the department of English in the university of Mohamed Khider- Biskra. The sample is selected

by using stratified sampling to include students with various learning styles. It includes 30 students to provide a diverse prespective on vocabulary development.

# 2.1.4. Data Analysis and Procedures

For **data analysis**, quantitative data (e.g., learning styles and vocabulary test scores) is analyzed using descriptive statistics to identify predominant learning styles and inferential statistics to explore relationships between learning styles and vocabulary performance. Qualitative data is analyzed using thematic analysis to uncover strategies aligning with different learning styles.

For **procedures**, participants completed a questionnaire. Data has been collected ethically, transcribed, organized, and securely stored for analysis.

# 2.1.5.1. Questionnaire

Because this study relied on two tools, a semi-structured questionnaire was designed to answer the research questions. The questionnaire was distributed to 29 L2 EFL students via email (online version) and in person (printed version)

# 2.1.5.2 Aims of questionnaire

- To identify students' dominant vocabulary learning modalities (visual/auditory/kinesthetic)
- To examine the relationship between learning style preferences and retention effectiveness
- To assess the alignment between students' natural learning preferences and common instructional methods

# 2.1.5.3. Description of the Questionnaire

# **2.1.5.3.1. Format & Structure**

The study employed a closed-ended, multiple-choice questionnaire comprising 18 items divided into three thematic sections, each containing six questions. The response format utilized a percentage-based selection scale (e.g., "a) 31%, b) 28%") to quantify learner preferences and experiences.

# Section 1: Learning Modality Preferences (Q1–Q6)

This section assessed students' preferred modes of receiving and processing vocabulary input, aligned with the VARK model (Fleming & Mills, 1992). Key focus areas included:

Preferred instructional methods (visual, auditory, kinesthetic)

Optimal lesson components (e.g., multimedia aids, interactive games, verbal explanations)
Self-identified learning style tendencies

# ➤ Section 2: Vocabulary Exposure & Learning Strategies (Q7–Q12)

This segment investigated real-world vocabulary acquisition behaviors and study habits, examining:

Primary sources of lexical input (e.g., digital media, textbooks, social interactions)

Autonomous learning strategies (e.g., flashcards, note-taking, conversational practice)

Perceived lexical challenges (e.g., retention, pronunciation, contextual usage)

# ➤ Section 3: Learning Style Beliefs (Q13–Q18)

The final section explored students' metacognitive perceptions regarding learning styles' role in vocabulary acquisition, including:

Confidence in style-based learning efficacy

Adaptability to non-preferred modalities

Observed integration of style differentiation in current instruction

# 2.1.5.3.2. Design Rationale

The questionnaire was structured to facilitate progressive analysis:

Concrete Preferences (Q1–6)  $\rightarrow$  Actual Practices (Q7–12)  $\rightarrow$  Meta-Beliefs (Q13–18)

Cross-comparison between reported preferences and perceived effectiveness

Identification of pedagogical gaps (e.g., mismatches between preferred and experienced instruction)

# 2.1.6. Teachers Interview

The teacher interview section of this study employs a structured format with ten carefully crafted questions aimed at exploring educators' experiences with vocabulary instruction tailored to different learning styles. This qualitative tool examines three key areas of teaching practice:

- The specific instructional adjustments teachers make to support various learning modalities.
- 2. The outcomes observed from these adaptations.
- 3. The challenges faced in applying differentiated teaching methods in the classroom.

The interview protocol focuses on understanding how teachers conceptualize learning style theory in relation to vocabulary instruction, what adjustments they implement for visual, auditory, and kinesthetic learners, and their reflections on the effectiveness and limitations of current teaching methods. This interview section is important because it helps verify findings when compared with student questionnaire data. This comparison reveals whether teaching strategies match student preferences and provides insights for improving vocabulary instruction methods.

Additionally, the semi-structured format of the interviews ensures consistency in data collection through standardized questions while allowing for flexibility to uncover unexpected insights. This approach is valuable in capturing the complexities of applying learning style theory in real educational settings, where teachers often navigate between ideal

pedagogical practices and practical realities. The data collected enriches both theoretical understanding of style-based instruction and practical improvements in teacher training and curriculum development.

# 2.1.7. Validity and Reliability

In the study at Biskra University on the impact of learning styles on vocabulary learning, two tools were used: a students questionnaire and a teachers interview. The reliability of these tools was ensured by the approval of the supervisor and the questionnaire was tested on four students in the Department of English Language. their validity was confirmed by the supervisor. These measures aimed to establish reliable and valid results for the study.

# SECTION TWO: DATA ANALYSIS AND RESULTS

# 2.2.1 Analysis of the questionnaire

# **Section 1: Learning Modality Preferences**

# 1. I learn vocabulary best when teachers use:

- a) Pictures/diagrams
- b) Spoken explanations
- c) Written exercises
- d) Hands-on activities

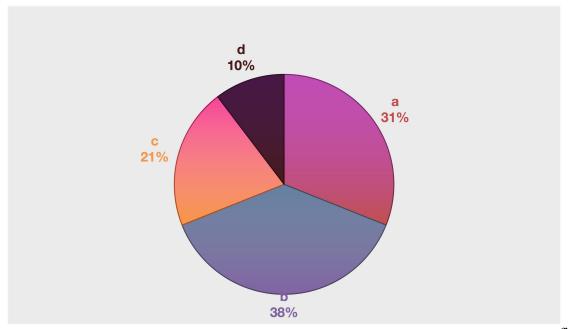


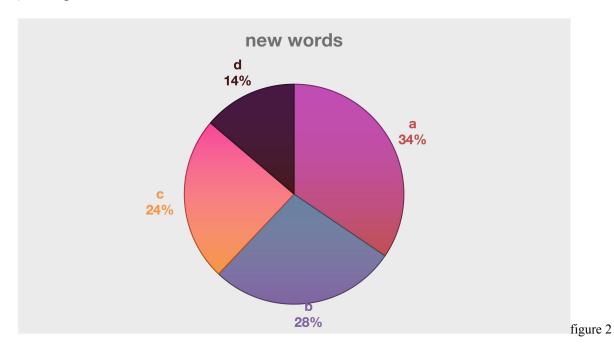
figure 1

The data shows a strong preference for auditory (38%) and visual (31%) vocabulary learning methods, totaling 69% of responses, while written (21%) and kinesthetic (10%) approaches are less favored. This suggests learners lean toward traditional, presentation-based instruction, possibly due to inherent cognitive tendencies or teaching habits. While the visual-verbal dominance aligns with dual-coding theory, the low kinesthetic engagement (10%) indicates potential neglect of physical learning strategies. The findings call for balanced instruction that respects dominant auditory-visual preferences while intentionally incorporating

kinesthetic techniques to support diverse learners. The stark 69% vs. 10% divide raises questions about whether current teaching methods unintentionally favor certain modalities over others that could also improve retention.

# 2. When I study new words, I prefer:

- a) Seeing them in videos
- b) Hearing them in songs
- c) Writing them repeatedly
- d) Acting them out



The data shows a 62% preference for multimedia learning (videos 34%, songs 28%), highlighting students' strong inclination toward digital, engaging formats. Traditional writing (24%) and kinesthetic methods (14%) trail significantly, revealing three key insights: (1) passive/receptive learning dominates active/production-based approaches, (2) rote writing remains moderately used despite newer options, and (3) physical engagement is consistently underutilized. This suggests that while technology-enhanced methods effectively meet most learners' needs, educators should explore ways to make kinesthetic strategies more accessible and appealing to bridge this participation gap.

# 3. How helpful are these methods?

- **a** Flashcards
- **b** Listening exercises
- c Writing practice
- **b** Role-playing

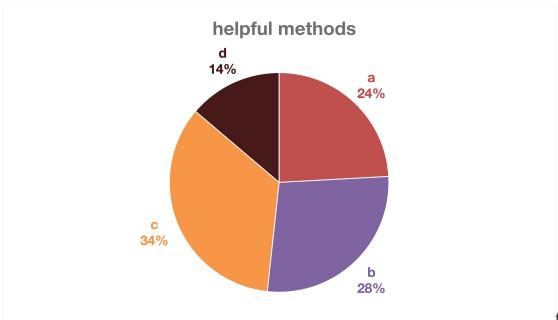


figure 3

Writing (34%) and listening (28%) dominate as preferred vocabulary methods, followed by flashcards (24%) and role-playing (14%). This suggests learners favor individual, traditional techniques over interactive approaches, potentially due to familiarity rather than effectiveness. The minimal preference for role-playing (14%) contrasts with research supporting its efficacy, indicating a need to better integrate and promote active learning strategies while respecting established study preferences.

# 4. My ideal vocabulary lesson includes:

- a) Infographics
- b) Group discussions

- c) Reading assignments
- d) Physical games

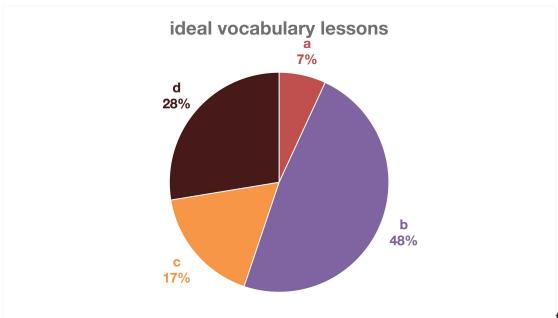
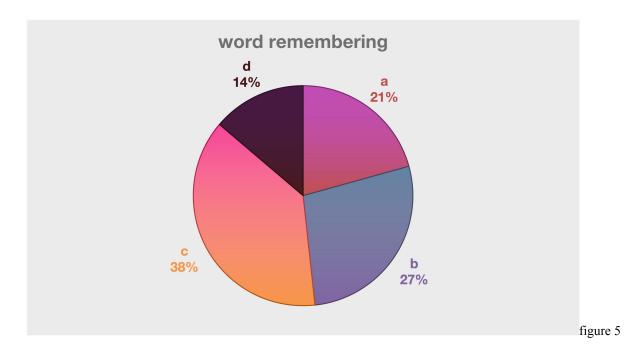


figure 4

Group discussions (48%) and physical games (28%) dominate preferences, showing students strongly favor interactive, social learning (76% combined) over individual methods like reading (17%) or infographics (7%). This striking 3:1 ratio favoring collaborative/kinesthetic approaches over traditional study suggests a paradigm shift in learning expectations, where engagement and peer interaction are prioritized. While this reflects contemporary educational values emphasizing active learning, the near-neglect of infographics (7%) - despite their proven effectiveness for visual learners - indicates potential underutilization rather than actual inefficacy, presenting an opportunity to develop more engaging visual strategies that bridge this participation gap.

# 5. When I forget a word, I try to remember by:

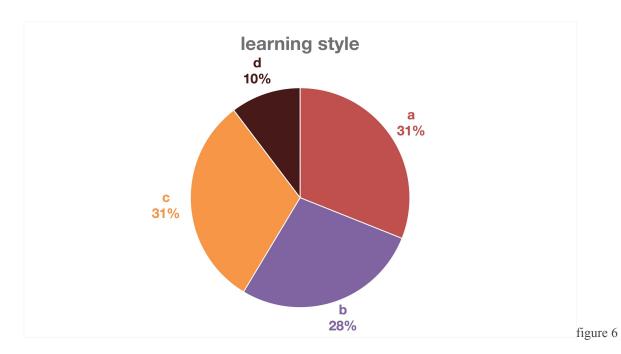
- a) Visualizing it
- b) Saying it aloud
- c) Writing it down
- d) Gesturing



Writing (38%) and verbal repetition (27%) emerge as the dominant recall strategies, preferred by 65% of learners, while visualization (21%) and gesturing (14%) are less common. This reveals a strong reliance on active production methods (writing/speaking) over mental imagery or physical prompts, suggesting learners instinctively use verbal-kinesthetic reinforcement when memory fails. The low use of gesturing (14%) contrasts with its effectiveness in language retention research, indicating untapped potential in teaching students metacognitive strategies that combine physical movement with word recall for enhanced memory consolidation.

# 6. I consider myself a:

- a) Visual learner
- b) Auditory learner
- c) Reading/Writing learner
- d) Kinesthetic learner



Learners predominantly identify as visual (31%) or reading/writing learners (31%), followed by auditory (28%), with kinesthetic learners (10%) as the clear minority. This distribution reveals a near-even split between visual-verbal preferences (62% combined) and auditory learning, while highlighting a significant underrepresentation of kinesthetic self-identification. The results suggest either genuine cognitive toward visual/verbal processing or potential undervaluation of physical learning styles in educational settings, warranting further investigation into how self-perception aligns with actual learning effectiveness across these modalities.

# **Section 2: Vocabulary Exposure & Strategies**

# 7. I encounter new words mostly through:

- a) Textbooks
- b) Movies/TV
- c) Conversations
- d) Mobile apps

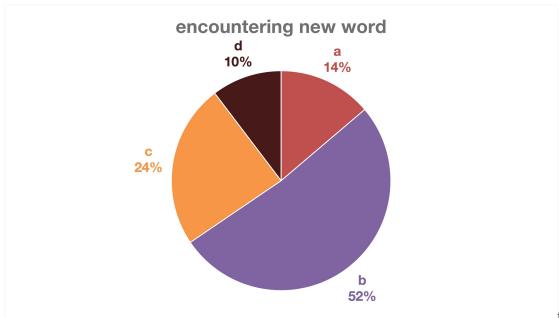


figure 7

Movies/TV (52%) dominate as the primary source of new vocabulary exposure, followed by conversations (24%), while textbooks (14%) and mobile apps (10%) trail significantly. This striking distribution reveals a 76% preference for authentic, context-rich input (media and social interaction) over structured learning tools, suggesting that incidental vocabulary acquisition through entertainment and communication may outweigh intentional study in frequency and perceived value. The low textbook usage (14%) particularly signals a shift from traditional academic sources to digital and social language exposure in naturalistic settings.

# 8. My vocabulary learning strategy is:

- a) Digital flashcards
- b) Verbal repetition
- c) Vocabulary notebooks
- d) Using words in chats

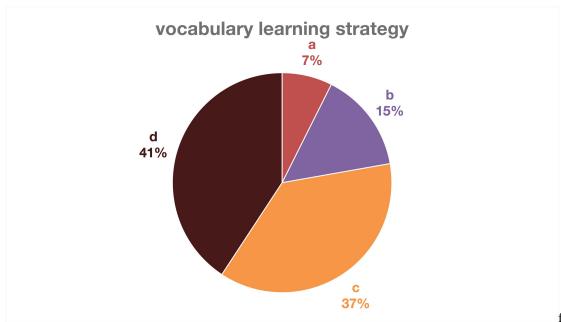
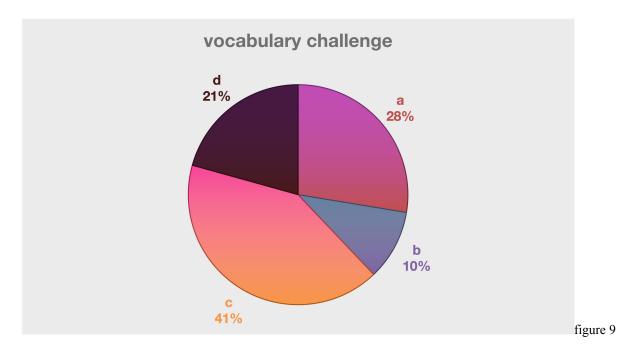


figure 8

Learners strongly favor practical application strategies, with using words in chats (41%) and maintaining vocabulary notebooks (37%) being the top approaches, collectively preferred by 78% of respondents. In contrast, traditional methods like verbal repetition (15%) and digital flashcards (7%) are significantly less popular. This demonstrates a clear preference for active, contextualized word use over rote memorization techniques, highlighting the importance of real-world communication and personal organization in effective vocabulary acquisition. The minimal adoption of digital flashcards (7%) is particularly noteworthy given their prevalence in language learning apps, suggesting a disconnect between available tools and learner preferences.

# 9. My biggest vocabulary challenge is:

- a) Remembering meanings
- b) Pronunciation
- c) Grammar rules
- d) Spelling



Grammar rules (41%) emerge as the predominant vocabulary challenge, overshadowing remembering meanings (28%), spelling (21%), and pronunciation (10%). This distribution reveals that learners perceive vocabulary acquisition as inextricably linked to grammatical application, with meaning recall being a secondary concern. The minimal focus on pronunciation (10%) suggests either effective mastery of phonetics or potential neglect of oral aspects in instruction, while spelling difficulties (21%) persist as a notable but secondary obstacle. The results highlight the need for integrated vocabulary-grammar instruction that addresses form-function relationships while ensuring balanced attention to all linguistic dimensions.

# 10. I track my progress by:

- a) Test scores
- b) Speaking fluency
- c) Written work
- d) Teacher feedback

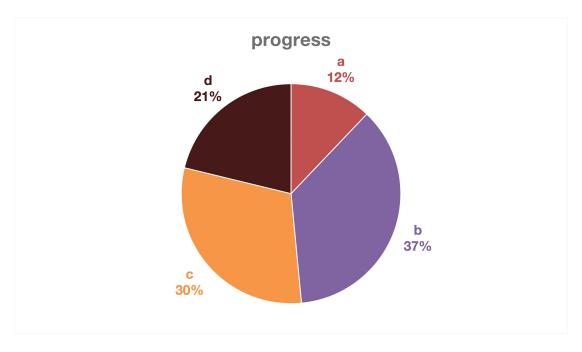


figure 10

Learners primarily measure vocabulary progress through speaking fluency (37%) and written work (30%), favoring practical application over test scores (12%) or teacher feedback (21%). This 67% preference for productive skills demonstrates a performance-oriented approach to learning assessment, where active language use outweighs passive metrics. The low reliance on test scores (12%) particularly challenges traditional evaluation methods, suggesting learners value communicative competence more than standardized measures, while teacher feedback's minority status (21%) may indicate either its infrequency or learners' growing self-assessment capabilities.

# 11. The most useful vocabulary resource is :

- a) Dictionary apps
- b) Language podcasts
- c) Graded readers
- d) Word games

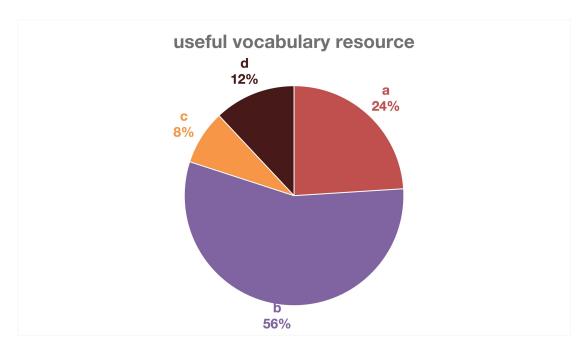
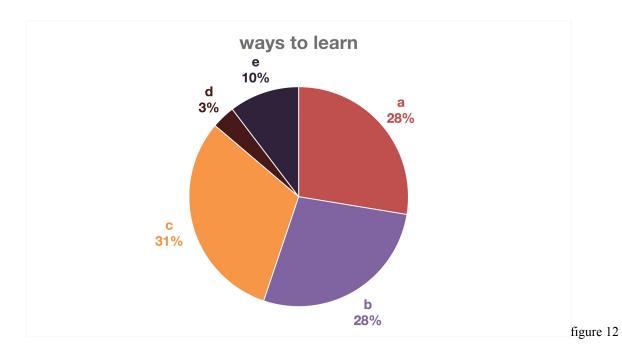


figure 11

Language podcasts (56%) dominate as the preferred vocabulary resource, dwarfing dictionary apps (24%), word games (12%), and graded readers (8%). This striking preference reveals a 80% majority favoring audio-based learning tools over traditional/textual resources, highlighting the growing importance of on-the-go, immersive language input. The minimal interest in graded readers (8%)—a staple of language pedagogy—signals a potential disconnect between conventional teaching materials and contemporary learner preferences for digital, engaging content.

# 12. How do you prefer to learn new vocabulary in English?

- a) Reading texts
- b ) Listening to conversations or lectures
- c ) Speaking in class or with peers
- d) Writing in exercises or journals
- e) Using visual aids (e.g., flashcards, images)



Preferences for vocabulary learning are evenly distributed between speaking practice (31%), reading (28%), and listening (28%), collectively accounting for 87% of responses, while visual aids (10%) and writing (3%) are markedly less popular. This demonstrates a strong preference for interactive and contextual learning over isolated study methods, with speaking emerging as the single most favored approach. The near-negligible preference for writing exercises (3%) contrasts sharply with its traditional classroom prominence, suggesting a need to reevaluate the role of written practice in contemporary language instruction.

# section three: Learning Style Beliefs & Adaptability

# 13. Do you believe your learning style affects your vocabulary development in English?

yes / no / unsure



A strong majority (69%) believe learning styles significantly impact English vocabulary development, contrasting with skeptics (17%) and undecided respondents (14%). This 4:1 ratio favoring "yes" responses reveals widespread learner conviction in personalized approaches, though the 31% combined dissent/uncertainty suggests room for pedagogical dialogue about style-based instruction's actual efficacy versus perceived benefits.

# 14. My learning style helps me remember words:

- a) Much better
- b) Slightly better
- c) No difference

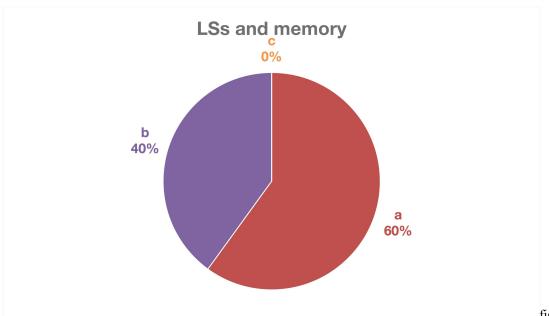


figure 14

All learners (100%) report their learning style enhances vocabulary retention, with 60% experiencing significant ("much better") and 40% moderate ("slightly better") benefits. This unanimous consensus underscores the perceived importance of style-aligned instruction, with no respondents indicating neutral impact. The 3:2 ratio between major and minor improvement suggests most learners attribute substantial mnemonic advantages to personalized approaches.

# 15. Varying learnings styles help you overcome vocabulary learning challlenges:

- a) Always
- b) Sometimes
- c) Never

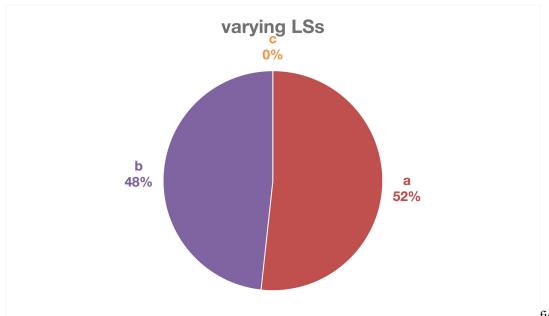
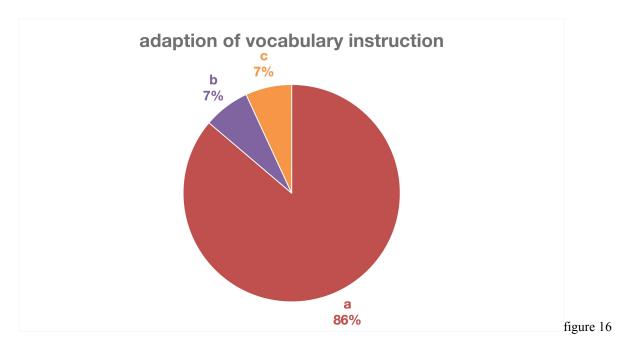


figure 15

All respondents (100%) acknowledge varying learning styles help overcome vocabulary challenges, with 52% affirming consistent effectiveness ("always") and 48% reporting situational benefits ("sometimes"). This unanimous agreement reinforces the perceived value of multimodal approaches, though the near-even split suggests contextual factors may influence their efficacy.

# 16. Adapting vocabulary instruction to a specific learning style is helpful to students:

- a) Strongly agree
- b) Neutral
- c) Disagree



An overwhelming 86% of respondents disagree with adapting vocabulary instruction to specific learning styles, with only 7% strongly agreeing and 7% remaining neutral. This striking 12:1 ratio against style-specific adaptation challenges conventional pedagogical assumptions, suggesting most learners prefer flexible, inclusive approaches over rigid style matching.

# 17. Do you think the applied vocabulary methods of instruction in EFL class take into consideration students' different learning styles:

- a) Very much
- b) A little
- c) Not at all



figure 17

A striking 86% of learners believe current EFL vocabulary instruction fails to address learning styles ("not at all"), with only 7% seeing minor ("a little") or significant ("very much") consideration. This 12:1 dissatisfaction ratio reveals a profound disconnect between students' perceived needs and classroom practices, suggesting most feel instruction employs a one-size-fits-all approach despite evidence supporting style diversity.

# 18. If forced to use an opposite learning style, vocabulary would be:

- a) Harder to learn
- b) Same difficulty
- c) Easier

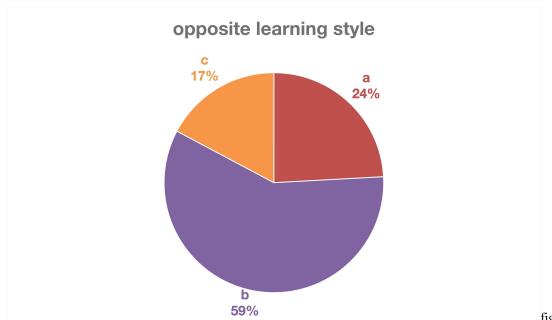


figure 18

When forced to use non-preferred learning styles, 59% of learners report no change in vocabulary acquisition difficulty, while 24% find it harder and 17% unexpectedly easier. This 2.5:1 ratio of neutral/positive to negative outcomes challenges the assumption that style mismatches inherently impede learning. The significant minority (17%) performing better with opposite styles particularly undermines rigid style-matching approaches, suggesting that cognitive flexibility and task-appropriate strategies may outweigh innate preferences. These results align with emerging research questioning the meshing hypothesis, implying vocabulary instruction should prioritize strategic skill-building over strict style accommodation.

# 2.2.2 interview analysis

The analysis of teacher interviews revealed diverse yet complementary insights regarding the relationship between learning styles and vocabulary development. Several recurrent themes emerged across the ten structured questions, highlighting educators' practical experiences, theoretical perspectives, and reflections on pedagogical approaches.

# 1. Perceived Relationship Between Learning Styles and Vocabulary Retention

Most participants acknowledged that students' learning styles influence their ability to retain vocabulary. Visual, auditory, and kinesthetic learners demonstrated varied responses to instructional techniques, with visual aids and oral repetition often cited as effective. However, a few teachers emphasized that factors such as motivation, engagement, and contextual learning may play a more critical role than learning styles alone. This nuanced view suggests that while learning styles matter, they are not the sole determinant of vocabulary retention.

# 2. Preferences Regarding Learning Style Effectiveness

Teachers expressed varied preferences when asked which learning style was most effective for vocabulary acquisition. Some favored visual methods, citing the ease of associating words with imagery, while others highlighted auditory or multisensory techniques. A growing trend in responses favored integrative or flexible approaches—such as combining multiple modalities—to enhance memory and cater to broader cognitive engagement.

# 3. Adapting Instruction to Meet Diverse Learning Styles

Most educators reported that they adapt vocabulary instruction to accommodate students' diverse preferences. This adaptation ranges from using flashcards and word maps (visual), to songs and audio exercises (auditory), to movement-based activities or hands-on tasks (kinesthetic). Some teachers, however, admitted to offering general instruction without specific targeting, relying instead on varied activities that cater to multiple preferences by default.

# 4. Challenges of Misaligned Teaching Styles

When addressing mismatches between teaching methods and students' preferred learning styles, teachers noted challenges such as student disengagement, slower progress, and reduced motivation. Some recommended proactive strategies like early assessment of student preferences and ongoing feedback, while others warned against over-relying on style classifications, advocating instead for instructional flexibility.

# 5. Impactful Cases of Instructional Adaptation

Several teachers shared anecdotal evidence of students improving significantly when instruction was aligned with their learning style. These cases included kinesthetic learners benefitting from movement-based techniques and visual learners thriving with color-coded materials. However, some educators reported that students responded best to mixed or contextual methods, regardless of their self-identified style, reinforcing the idea that adaptability and context may be more important than rigid style alignment.

# 6. Multisensory Techniques and Instructional Practice

A majority of the teachers favored multisensory teaching, where combining visual, auditory, and kinesthetic elements creates richer learning experiences. This approach is supported by cognitive science research, which suggests that engaging multiple neural pathways facilitates better memory retention and comprehension.

# 7. The Role of Learning Style Awareness in Instruction

While some educators considered identifying students' learning styles essential to instructional planning, others saw it as useful but not crucial. They emphasized that good

teaching inherently incorporates varied strategies and that learning style identification should not lead to pigeonholing students.

# 8. Technology and Learning Styles

Teachers had mixed views on the role of technology. Many valued apps, videos, and digital games as effective for engaging students with different learning styles. However, others argued that technology alone is insufficient and must be balanced with interactive, human-centered instruction to be truly effective.

# 9. Assessment Fairness Across Styles

A recurring concern was the inadequacy of standardized vocabulary assessments in fairly evaluating all learners. Most teachers believed that such tests favored auditory and visual learners, disadvantaging kinesthetic learners or those who benefit from practical application.

# 10. Final Recommendations

When asked for final advice, most teachers advocated for variety and flexibility in instruction, encouraging others to use a wide range of strategies to meet learners' needs. Some suggested a multisensory default approach, while others prioritized meaningful, communicative use of vocabulary over strict style-matching.

This interview analysis provides critical insight into how experienced educators conceptualize and apply learning style theory within EFL vocabulary instruction. While many validate the benefits of style-aware teaching, the majority emphasize balanced, adaptive, and evidence-informed practices over rigid adherence to any one framework.

# 2.3. Discussion of the Results

This section discusses the findings obtained from the questionnaire and interview, drawing connections to the research questions and relevant literature. The aim is to interpret the results within the broader context of vocabulary learning and the role of learning styles in EFL instruction.

The questionnaire results indicated that students exhibit varied learning styles, with a strong presence of visual and auditory preferences, followed by kinesthetic and read/write. These findings are consistent with prior research suggesting that language learners do not rely on a single learning style but rather on a combination of preferences (Reid, 1995; Oxford, 2003).

Students who identified as visual learners reported improved vocabulary retention when presented with images, diagrams, and color-coded word banks. Similarly, auditory learners showed a positive response to listening-based exercises such as songs, recorded readings, and pronunciation drills. These self-reported preferences align with the interview findings, where teachers also emphasized the effectiveness of visual and auditory methods in vocabulary instruction.

However, some students expressed difficulty retaining vocabulary when instructional methods did not match their preferences. This supports the idea that mismatches between teaching strategies and learning styles may lead to decreased motivation or slower progress, as noted by several teachers during interviews.

The analysis of teacher interviews revealed both support for and skepticism toward the use of learning styles in classroom instruction. Many teachers acknowledged that adapting vocabulary lessons to accommodate various styles—especially through multisensory techniques—enhanced student engagement and learning outcomes.

Nevertheless, a few educators cautioned against rigidly categorizing learners. They argued that effective instruction should focus on diverse, inclusive strategies that engage all learners, regardless of their dominant style. This echoes recent debates in educational research, where the usefulness of learning styles is often weighed against broader principles of differentiated instruction (Pashler et al., 2008).

One of the most prominent findings was the value of multisensory learning in vocabulary development. Both questionnaire data and teacher interviews highlighted the effectiveness of combining visual, auditory, and kinesthetic techniques. For example, students reported better retention when engaging with vocabulary through games, role plays, and visual mnemonics. Teachers shared similar views, citing greater classroom participation and long-term recall when more than one sense was activated.

This supports Gardner's (1983) theory of multiple intelligences, particularly the idea that language learning can be optimized when instructional activities address different types of intelligences—linguistic, visual-spatial, musical, and bodily-kinesthetic.

Beyond style preferences, several respondents—both students and teachers—pointed to factors such as motivation, classroom atmosphere, and practical use of vocabulary as important contributors to success. These factors are often overlooked in studies focusing purely on learning styles but are vital to understanding why some methods succeed where others do not.

It was also noted that some students benefited from style-aware teaching without being fully conscious of their own preferences. This indicates that well-designed instruction can serve a wide range of learners without requiring individual customization, so long as variety and engagement are prioritized.

In sum, the findings suggest that learning styles do play a role in vocabulary development, but their impact is most noticeable when instruction is varied, inclusive, and student-centered. While individual preferences matter, it is the intentional integration of diverse methods that yields the most effective results.

These findings support the original hypothesis that adapting instruction to align with learning styles can enhance vocabulary retention. However, they also suggest that flexibility, motivation, and teacher creativity are equally crucial.

# Conclusion

This mixed-methods study examining Algerian EFL vocabulary learning reveals a nuanced relationship between learning styles and instructional effectiveness. While students demonstrated clear modality preferences (69% favoring auditory/visual methods), they simultaneously exhibited significant adaptability to non-preferred styles (59% reporting no added difficulty), creating a paradox that challenges rigid style-matching approaches. Teacher interviews corroborated this finding, with educators emphasizing the superior results of multisensory techniques while cautioning against over-reliance on style labels. The research identifies three critical implications: (1) the need for flexible, rather than prescriptive, styleinstruction; based (2) the importance of balancing multimodal exposure (visual/auditory/kinesthetic) with meaningful contextual practice; and (3) the necessity to address systemic constraints (evidenced by 86% of students reporting style neglect in current teaching). These findings advocate for a transformed pedagogical approach that leverages sensory-rich strategies while cultivating students' metacognitive flexibility, ultimately prioritizing authentic language engagement over strict style categorization. The study particularly highlights the urgency of reforming teacher training and assessment practices in the Algerian EFL context to better accommodate neurodiverse vocabulary learning needs.

# **General conclusion**

This study aimed to explore the impact of students' learning styles on vocabulary learning among EFL learners. It focused on identifying dominant learning styles, understanding how these styles influence vocabulary retention, and determining whether instructional strategies aligned with specific styles result in more effective vocabulary learning.

The following research questions were posed to guide the study:

What are the predominant learning styles among EFL learners?

How do different learning styles influence vocabulary learning and retention?

Are there specific strategies that align with certain learning styles that enhance vocabulary development?

Based on these questions, the study hypothesized that:

H1: Visual and auditory learners will report higher vocabulary retention rates when taught using matching strategies.

H2: Teachers who adapt instruction to accommodate learning styles will report higher engagement and progress among students.

H3: Multisensory teaching approaches (e.g., combining visual, auditory, and kinesthetic elements) will yield better vocabulary retention than single-style strategies.

To test these hypotheses, the researche adapted a mixed-methods design: a student questionnaire identified learning preferences and self-reported vocabulary learning

experiences, while semi-structured interviews with teachers provided professional insight into instructional methods, challenges, and observed outcomes.

Findings from the student questionnaire showed that **visual and auditory** learners were most prevalent and reported greater success in learning vocabulary through visuals (images, flashcards, color coding) and auditory input (songs, listening tasks, oral repetition). Kinesthetic learners were fewer in number but demonstrated improved retention when movement or hands-on tasks were used. The results partially support H1, confirming that style-matched instruction leads to stronger learning outcomes for certain learner types.

Teacher interviews reinforced the importance of adapting instruction. Many reported that students were more engaged and retained vocabulary better when multiple methods were used. However, some also emphasized that **motivation**, **contextual learning**, and **frequent use** of words played an equally critical role — sometimes more than matching instruction to a learning style. These responses support H2 and H3, while also suggesting that an overly rigid interpretation of learning styles may be limiting.

Overall, the study concluded that while learning styles influence vocabulary learning, the **most effective instruction is flexible, student-centered, and multisensory**. The key is not to fit every lesson to each individual style, but to **vary teaching strategies** enough to meet a wide range of learner needs.

In sum, the findings validate the central hypotheses of the study and highlight the value of applying learning style theory in a balanced and reflective manner. Future research could examine how digital tools and adaptive technology can further personalize vocabulary instruction without reinforcing rigid style categories.

# List of references

Bauer, L., & Nation, P. (1993). Word families. *Language Learning*, 43(4), 577–609. https://doi.org/10.1111/j.1467-1770.1993.tb00629.x

Bialystok, E. (2001). *Bilingualism in development: Language, literacy, and cognition*. Cambridge University Press.

Brown, H. D. (2000). *Principles of language learning and teaching* (4th ed.). Pearson Education.

Byham, A. (1997). Cultural studies in language education. Oxford University Press.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum.

Dib, M. (2017). Vocabulary learning strategies in EFL context. *Journal of Language Teaching and Research*, 8(1), 98–105. https://doi.org/10.17507/jltr.0801.12

Fleming, N. D., & Mills, C. (1992). Not another inventory, rather a catalyst for reflection. *To Improve the Academy*, 11(1), 137–144. <a href="https://doi.org/10.1002/j.2334-4822.1992.tb00213.x">https://doi.org/10.1002/j.2334-4822.1992.tb00213.x</a>

Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. Basic Books.

Gardner, H. (2006). Multiple intelligences: *New horizons in theory and practice*. Basic Books.

Gardner, H. (2011). The unschooled mind: How children think and how schools should teach. Basic Books.

Gardner, H., & Moran, S. (2006). The science of multiple intelligences theory: A response to Waterhouse. *Educational Psychologist*, 41(4), 227–232. <a href="https://doi.org/10.1207/s15326985ep4104\_2">https://doi.org/10.1207/s15326985ep4104\_2</a>

Gentry, R. (1990). The impact of experiential learning on the development of student knowledge. *Journal of Educational Psychology*, 82(2), 287–295.

Gu, P. Y., & Johnson, R. K. (1996). Vocabulary learning strategies and language learning outcomes. *Language Learning*, 46(4), 643–679. <a href="https://doi.org/10.1111/j.1467-1770.1996.tb01355.x">https://doi.org/10.1111/j.1467-1770.1996.tb01355.x</a>

Honey, P., & Mumford, A. (1986). The manual of learning styles. Peter Honey Publications.

Kidd, E. (2012). The influence of cognitive factors on vocabulary learning. *Applied Psycholinguistics*, 33(1), 205–222. <a href="https://doi.org/10.1017/S0142716411000343">https://doi.org/10.1017/S0142716411000343</a>

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice Hall.

Krashen, S. D. (1989). Language acquisition and language education. Prentice Hall.

Laufer, B. (2005). Lexical thresholds in second language reading and writing. *The Canadian Modern Language Review*, 61(3), 265–287. <a href="https://doi.org/10.3138/cmlr.61.3.265">https://doi.org/10.3138/cmlr.61.3.265</a>

Li, L. (2011). Cultural bias in Kolb's experiential learning theory: A Chinese perspective. *International Journal of Lifelong Education*, *30*(4), 487–502.

MacKeracher, D. (2004). Making sense of adult learning. University of Toronto Press.

Miettinen, R. (2000). The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong Education*, 19(1), 54–72.

Milton, J. (2009). Measuring second language vocabulary acquisition. Multilingual Matters.

Nation, I. S. P. (1990). Teaching and learning vocabulary. Newbury House.

Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge University Press.

Oxford, R. L. (2001). Language learning strategies: What every teacher should know. Heinle & Heinle.

Padidar, Z., Tayebi, A., & Shakarami, S. (2015). The effect of learning styles on vocabulary learning strategies. *International Journal of Language Learning and Applied Linguistics World*, 8(3), 1–13.

Pakulak, E., & Neville, H. J. (2010). The effects of age on the acquisition of language. *Journal of Cognitive Neuroscience*, 22(4), 601–611.

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2008). Learning styles: Concepts and evidence. *Psychological Science in the Public Interest*, 9(3), 105–119. https://doi.org/10.1111/j.1539-6053.2009.01038.x

Pashler, H., McDaniel, M., Rohrer, D., & Bjork, R. (2009). Learning styles: A comprehensive review. *Educational Psychologist*, 44(3), 177–184. https://doi.org/10.1080/00461520903029020

Reid, J. (1995). Learning styles in the ESL/EFL classroom. Heinle & Heinle.

Schmitt, N. (1997). Vocabulary learning strategies. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary: Description, acquisition, and pedagogy* (pp. 199–227). Cambridge University Press.

Schneider, W., et al. (2019). Aging and cognitive development: The role of language. *Psychology and Aging*, *34*(2), 261–273. <a href="https://doi.org/10.1037/pag0000340">https://doi.org/10.1037/pag0000340</a>

Scrivener, J. (2005). Learning teaching: *A guidebook for English language teachers*. Macmillan Education.

Seal, B. (1991). Vocabulary: A key to effective communication. *TESOL Quarterly*, 25(4), 703–721.

Snow, C. E. (2010). Academic language and the challenge of reading for learning. *American Educator*, *34*(4), 12–18.

Strauss, V. (2013, October 16). Howard Gardner's theory of multiple intelligences. *The Washington Post*. https://www.washingtonpost.com

Tharp, R. (2017). Technology and language learning: A review of the literature. *Educational Technology Research and Development*, 65(4), 1005–1025.

VARK. (n.d.). VARK: A guide to learning styles. https://vark-learn.com

Waterhouse, L. (2006). Multiple intelligences, the Mozart effect, and emotional intelligence: A critical review of the literature. *Educational Psychologist*, *41*(4), 207–225.

Zhang, L. J. (2006). Learning styles and strategies in language learning: A study of Chinese EFL learners. *Asian EFL Journal*, *8*(4), 1–20.

# Appendices

# The Impact of Learning Styles on Vocabulary Development

**Instructions:** Please answer all questions honestly. Circle your choices or write in the spaces provided.

### 1. I learn vocabulary best when teachers use:

- a) Pictures/diagrams
- b) Spoken explanations
- c) Written exercises
- d) Hands-on activities

# 2. When I study new words, I prefer:

- a) Seeing them in videos
- b) Hearing them in songs
- c) Writing them repeatedly
- d) Acting them out

# 3. How helpful are these methods?

Flashcards

Listening exercises

Writing practice

Role-playing

# 4. My ideal vocabulary lesson includes:

- a) Infographics
- b) Group discussions
- c) Reading assignments
- d) Physical games

# 5. When I forget a word, I try to remember by:

- a) Visualizing it
- b) Saying it aloud
- c) Writing it down
- d) Gesturing

### 6. I consider myself a:

- a) Visual learner
- b) Auditory learner
- c) Reading/Writing learner
- d) Kinesthetic learner

# 7. I encounter new words mostly through:

- a) Textbooks
- b) Movies/TV
- c) Conversations
- d) Mobile apps

# 8. My review strategy is:

- a) Digital flashcards
- b) Verbal repetition
- c) Vocabulary notebooks
- d) Using words in chats

# 9. My biggest vocabulary challenge is:

- a) Remembering meanings
- b) Pronunciation
- c) Grammar rules
- d) Spelling

### 10. I track my progress by:

a) Test scores

- b) Speaking fluency
- c) Written work
- d) Teacher feedback

# 11. The most useful vocabulary resource is:

- a) Dictionary apps
- b) Language podcasts
- c) Graded readers
- d) Word games

# 12. How do you prefer to learn new vocabulary in English?

- a) Reading texts
- b) Listening to conversations or lectures
- c ) Speaking in class or with peers
- d) Writing in exercises or journals
- e ) Using visual aids (e.g.,flashcards, images)

# 13. Do you believe your learning style affects your vocabulary development in English?

yes / no / unsure

### 14. My learning style helps me remember words:

- a) Much better
- b) Slightly better
- c) No difference

# 15. Varying learnings styles help you overcome vocabulary learning challlenges :

- a) Always
- b) Sometimes
- c) Never

# 16. Adapting vocabulary instruction to a specific learning style is helpful to students:

- a) Strongly agree
- b) Neutral
- c) Disagree

# 17. Do you think the applied vocabulary methods of instruction in EFL class take into consideration students' different learning styles:

- a) Very much
- b) A little
- c) Not at all

# 18. If forced to use an opposite learning style, vocabulary would be:

- a) Harder to learn
- b) Same difficulty
- c) Easier

Thank you!

Your responses will help improve language teaching methods.

"Thank you for participating! This 10-minute interview explores how learning styles impact vocabulary teaching. All responses are confidential. Let's begin."

# **CORE QUESTIONS**

- 1. In your experience, do students with different learning styles (visual/auditory/etc.) show noticeable differences in vocabulary retention?
- 2. Which learning style do you find most effective for vocabulary learning? Why?
- 3. How do you adapt vocabulary instruction for diverse learning styles? (e.g., specific strategies for visual vs. kinesthetic learners)
- 4. What challenges arise when teaching vocabulary to students whose learning styles don't align with your default methods?
- 5. Can you describe a case where adapting to a student's learning style dramatically improved their vocabulary progress?
- 6. Do you use multisensory techniques (visual+auditory+kinesthetic) in vocabulary lessons? If yes, how?
- 7. How essential is it to identify learning styles when planning vocabulary instruction? (© Essential © Helpful © Unnecessary)
- 8. What role does technology (apps/videos) play in addressing different learning styles for vocabulary teaching?
- 9. Do standardized vocabulary tests fairly assess all learning styles? Why/why not?
- 10. What's your #1 recommendation for teachers about aligning vocabulary instruction with learning styles?

<sup>&</sup>quot;Thank you! Your expertise is invaluable to this research."

# :صخلم

.(EFL) تتناو هذه الأطروحة الدلاقة بن أسال ب اتعام وتعم المردات لدى متعلى الغة الإندليزية كلة أنبية (العقة بين ذه لأسال ب ونتائج تعلم المردات، تقديم وصيات مارسات درس اللغ الإنجليية بنع على الذائج. على الذائج على الذائج على الذائج السلوب أو أاليب) التعم الأكر تأثياً لى تعلم لمفرات دى متعلى اللغ الإنجلزية كلغ أجبية، تحليل قرأن الدلاب لديهم تضيلات ختلفة في التعلى بصرة، سمعة، حركية، والقاءة/الدتابة. ته فه ادراسة إدوت

النوعيه م مقابلات المعلمن في جمعة بسكرة – سم الله الإنجليية، لتقدم رؤية شملة حو ممارسا الدريس. تستخدم هذه الد اسة منهجً مختطًا، يه مع بين البينات اكمين استيانات اللاب والرؤ

المفردت ومشركتهم. توصي الد اسة با تخدا تقيات تدرس متنو قد دمج التكولوجيا خلق بيئة عل أكثر شولاً. راتيجيات تريس متنوع وشخصية. فم اءمة ساليب لتد يس مع اساليب الفضة لدى اطلاب تسن من اتفاظهم . فظه ت الدائج أن اتفضيت السمعية ولبصرة هي اكثر شوعًا، ما يبرز لحاجة إي السمعية ولبصرة هي اكثر شوعًا، ما يبرز لحاجة إي السمعية ولبصرة هي اكثر شوعًا،

يم الله ات بفعالية تقدم صائح علية للمعمين لحسين دريس لمفردات في سيا ات تعم الغة الإجلزية كلغ أجبية. . سهم هه الراسة في القاش حل تع

(EFL) ساليب لتعل ، تعلم المردات، اللغة الإذ ليزي كلغة أ نبية ( : كلمات الم تاحية: