



Fecha de presentación: agosto, 2024 Fecha de aceptación: octubre, 2024 Fecha de publicación: diciembre, 2024

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## The Effectiveness of the English Attack LMS Platform to Enhance Vocabulary According to the CEFR

La Efectividad de la Plataforma English Attack para Potenciar el Vocabulario de acuerdo al MCER

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Cita sugerida (APA, séptima edición)

Hilaño, M.A. y Villacrés, M.A. (2024). The Effectiveness of the English Attack LMS Platform to Enhance Vocabulary According to the CEFR. Revista Mapa, 5(37), 75–97.

<http://revistamapa.org/index.php/es>

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## RESUMEN

Esta investigación examina las potencialidades de la Plataforma English Attack (LMS), basado en educación y entretenimiento y diseñada para mejorar y complementar la adquisición de vocabulario de acuerdo con el Marco Común Europeo de Referencias (CEFR). La plataforma integra ejercicios innovadores con videoclips, imágenes y juegos, alineados a los niveles de inglés desde A2 hasta C2. La pandemia de COVID19 planteó desafíos significativos para la educación, con escuelas y maestros no preparados para la enseñanza a distancia utilizando LMS. En Ecuador, el repentino cambio en la modalidad de enseñanza puso en relieve la falta de familiaridad de los maestros con los programas especializados y las metodologías activas para la enseñanza en línea, lo que afectó al rendimiento, en particular en las instituciones estatales con presupuestos limitados y en las escuelas privadas. Este estudio tuvo como objetivo analizar la efectividad de la Plataforma English Attack para mejorar el vocabulario de acuerdo con el (CEFR). Se empleó un diseño cuasiexperimental, en el que participaron 27 estudiantes de tercer año del Colegio SAN PIO X en Ambato-Ecuador. Los datos se recopilaban mediante una prueba previa y posterior basadas en una actividad de videoclip de nivel B2. Los hallazgos indicaron que la adquisición de vocabulario mejoró significativamente al utilizar la plataforma English Attack que ofrece los niveles adecuados y apoya el desarrollo de competencias digitales, en comparación con el uso de una gama de vocabulario sin un nivel específico.

**Palabras claves:** efectividad, LMS English Attack Platform, mejora, vocabulario.

## ABSTRACT

This research examines the affordances of the English Attack Platform (LMS), an edutainment-based dynamic learning environment designed to enhance and complement vocabulary acquisition according to the CEFR. The platform integrates innovative exercises with video clips, pictures, and games, targeting English levels from A2 to C2. The COVID-19 pandemic posed significant challenges to education, with schools and teachers unprepared for remote teaching using LMS. In Ecuador, the sudden shift in teaching modality highlighted teachers' unfamiliarity with specialized software and active online teaching methodologies, affecting performance, particularly in state institutions with limited budgets and private schools alike. This study aimed to analyze the effectiveness of the English Attack LMS Platform in enhancing vocabulary according to the CEFR. A quasi-experimental design was employed, involving 27 third-year students from SAN PIO X High School in Ambato, Ecuador. Data were collected through pre-and post-tests based on a B2 level video clip activity. Findings indicated that vocabulary acquisition improved significantly when students used the English Attack platform, which offers appropriate vocabulary levels and supports the development of digital competencies, compared to using a broader, non-specific vocabulary range.

**Keywords:** effectiveness, enhance, LMS English Attack Platform, vocabulary





## INTRODUCCIÓN INTRODUCTION

Even though Education in industrialized countries is growing up due to the breakthrough of new technologies applied to education, it is not the same scenario in nondeveloping countries, especially in those which are still marked by the exclusion of minorities whether ethnic, social, economic, cultural or people have limited access to the worldwide net. Moreover, COVID-19 further aggravated this socioeconomic fact. The abrupt change of school activities from in person to online education had a great impact on students, teachers, and educational administrators. This phenomenon demanded the necessity to apply technology to education. To do so, it is of overriding importance to fathom the analysis of how effective the use of specialized Learning Management Systems (LMS) is to enhance the acquisition of skills in specific the use of the language, focusing on the acquisition of vocabulary in relation with the appropriate level according to the Common European Framework of References of Languages (CEFR).

People all over the world are aware that the process of digitalization as a measure of adapting to the new challenges that societies are facing is a truth nowadays. Educators are the key to this changeover because of their crucial role in reflecting knowledge related to de adoption and implementation of Information and Communication Technologies (ICTs) in educational programs. Besides, Basilotta-Gómez-Pablos et al (2022) mention that The National Plan of Digital Competences in Spain elaborated by the Ministry of Economic Affairs and Digital Transformation (MINECO) in 2021, recognized the necessity of adapting digital competences to all educational levels. It is viewed that, teachers must master effective digital competences to handle Learning Management Systems as those needed in a communicational approach such as knowledge, skills, and attitudes in a virtual or blended context.



In recent years due to pandemic problems, frequent states of exception for insecurity, strikes, transport stoppages among others, which Ecuador has been facing, educational institutions have had to change their teaching modalities and opt for Learning Management Systems that allow them to continue their educational work. Therefore, it was necessary to adapt resources and external tools for online teaching. Because of this, educators have had the duty of learning and using different environments and teaching strategies to apply a variety of extra online teaching-learning tools like common Learning Management Systems such as Moodle, Canvas, Blackboard Learn, Google Classroom, Schoology, Edmodo, Seesaw, Teams, TalentLMS, Brightspace among others which have interactive content to overcome this social problem.

To provide the best user experience, Learning Management Systems (LMS) aim to support teachers in creating high-quality online courses for various formats, including distance and online education. Significantly, these Learning Management Systems can hold educational programs that support attendance like blended learning, and b-learning which combine remote and on-site training sharing resources and online materials. Moreover, Maldonado, (2020) mention that B-learning also promotes personalized learning, but additionally collaborative learning, where Learning Management Systems platforms improve this aim; and teachers can apply a big range of techniques to achieve linguistics skills in their students. According to studies, it is revealed that-sharing ideas in a team or group promotes the participation of shy learners letting them feel free to come up with their interventions in a collaborative assignment.

Despite the widespread recognition that not all educational institutions employ standardized Learning Management Systems (LMS) for teaching, those that do can significantly enhance their educational offerings. Thus, it is paramount to analyze different teachers' perspectives while working with innovative online teaching systems applied to education which contribute the acquisition of the language. To sum up, this study leads to analyzing the effectiveness on using the English Attack LMS Platform to enhance

vocabulary according to the Common European Framework of References (CEFR) with students of third year at San Pio X High School in Ambato.

Therefore, to achieve the above-mentioned, the following task have been set out: To evaluate the effectiveness of the English Attack LMS Platform to enhance vocabulary according to the CEFR.

The previous reality has allowed for the following research question:

How can the use of English Attack LMS enhance the vocabulary acquisition?

## DEVELOPMENT

### Learning Management System (LMS)

A Learning Management System (LMS) is a software application designed to provide a framework for the administration, documentation, tracking, reporting, and delivery of educational courses or training programs. There are various types of LMS, including academic LMS for schools and universities, and custom-built LMS tailored to specific organizational needs. Examples of LMS platforms used for vocabulary teaching include Moodle, Blackboard, and Canvas, which support diverse instructional strategies and interactive learning environments. These systems facilitate vocabulary acquisition through features like gamification, progress tracking, and personalized feedback.

LMS platforms are essential tools for teaching English vocabulary, enhancing interactivity and educational content. According to Bradley, (2020) LMS platforms help students assess their progress and assist teachers in tracking progress while facilitating gamification to boost engagement. LMS platforms are crucial for vocabulary teaching by monitoring student progress and incorporating gamification strategies, which increase participation and commitment in the learning process.

Some examples of very well know platforms which help students and teachers to develop vocabulary or just to teach the language could be:

Digital platforms which focus on educational content, variety, relevance, and adaptability. According to Gao & Pan, (2023) gamification in English vocabulary learning applications significantly impacts teaching by providing immediate, personalized feedback. The Global Usage Ranking of Gamification Platforms highlights improvements in student engagement and retention. Mahmoud, (2022) notes English Attack's effectiveness, combining CEFR alignment and gamification to enhance vocabulary acquisition. Incorporating diverse elements from platforms like Kahoot! and Quizizz can further boost engagement and retention.

### **The English Attack LMS Platform**

The English Attack LMS platform has emerged as a promising tool for improving English vocabulary, especially in educational environments where language competence is crucial. The mastery of the English language is increasingly valued in the working and academic world. Effective use of learning platforms such as English Attack LMS can have a significant impact on the development of language skills in Ecuador, where English is an important requirement for access to educational and employment opportunities. Moreover, English Attack, which specializes on CEFR aligned activities with gamified aspects, engaging content, and personalized feedback. Its incorporation of more diversified interactive and collaborative aspects has the potential to increase its efficacy.

To improve English learning, the English Attack platform explores the combination of education and entertainment, known as "edutainment". It is translated into 27 languages, including English. The use of Video Booster with more than 1,800 activities based on movies, television series, music, news and social topics, as well as recreational activities, highlights the use of vocabulary reinforcement. In addition, it has a photographic

vocabulary (Photo Vocab) of more than 400 visual dictionaries on topics such as distraction, body and health, business and education, clothing and fashion, culture, food and beverage, hobbies and technology, nature, places, society, sports, home, transport, travel and, finally, the Verb Dash Game to review irregular verbs.

English Attack employs several strategies to promote English immersion to assist with English language learning, like for example: Game-based learning, Authentic learning, Word attack strategies.

English Attack boosts English learning through internet entertainment and gamification elements. Mahmoud, (2022) states, "English Attack is a 100% environmentally focused online resource for improving English as a second and foreign language skills." This platform emphasizes repetition vocabulary in a gamified format, helping students understand language in a visual context. By using short-format video clips from various media sources, it enables practice in real-world scenarios. Additionally, learning games, social networking features, personalized feedback, and progress tracking enhance the learning experience.

### **Gamification**

Gamification refers to incorporating game elements into educational activities to foster student participation, motivation, and learning. It involves using points, timers, badges, and leaderboards to create collaborative or competitive activities with specific goals. This approach includes incentives, obstacles, rivalries, and captivating stories to engage students actively. Gamification motivates students, improves knowledge retention, and promotes active participation, making learning more interactive and enjoyable. It creates a dynamic learning environment, enhancing participation and academic results, and adapts to various learning styles, benefiting students struggling with traditional methods.

Constructivist learning theory and game-based learning suggest that students learn best when actively involved in meaningful tasks. According to Hamari et al., (2014), gamification is effective in improving vocabulary retention and acquisition in English language learning. Gamification encourages active participation and facilitates greater retention, adapting to individual needs through different levels of difficulty and activities. Unal et al., (2021) note that flipped classrooms enhance cooperative learning and problem-solving skills, using videos for pre-class content and active exercises during class, often combined with gamification elements like online quizzes, polls, infographics, and mind maps.

### **Gamification Rewards**

In the pre-test, the gamification rewards were integrated into part 1, which comprised 8 vocabulary definition questions. The first four vocabulary definition questions added 50 points to part 7, Grammar Scramble Words, while the following four questions contributed 50 points to part 8, Grammar Spelling. Conversely, within the English Attack gamification platform, this reward was credited to the questions in part 6, Grammar Scramble Words, and part 7, Grammar Spelling, for quick responses. This strategy aimed to balance the pre-test scores and motivate students to respond swiftly in the posttest, enhancing their engagement and performance in these critical sections.

### **Vocabulary Acquisition**

A key element of learning a language is expanding one's vocabulary, which provides the foundation for clear understanding and productive communication. Vocabulary is important because it helps students communicate ideas, comprehend written and spoken texts, and participate in meaningful conversations. Words that are understood when heard or read are referred to as receptive vocabulary, and words that are used when speaking or writing are referred to as productive vocabulary. This

differentiation is essential in educational settings, especially when assessing language competency using frameworks like the Common European Framework of Reference for Languages (CEFR).

### **Importance of Vocabulary Acquisition for Communication**

Vocabulary is fundamental to learn for communication among human beings. Therefore, some researchers have mentioned its relevance such as Schmitt, (2000), who highlights the pivotal role of vocabulary in language acquisition, emphasizing that vocabulary knowledge is central to effective communication and language learning. His findings review various instructional techniques and strategies that can aid teachers in enhancing vocabulary teaching, addressing common challenges in the process. Taking these considerations into account, effective vocabulary instruction is key to successful communication and learning.

The teaching and learning of vocabulary are crucial components of mastering the English language, particularly for English as a Foreign Language (EFL) students. Effective strategies are essential to enhance vocabulary acquisition and retention. Villacrés & Solis, (2023) show that mimics significantly improves English vocabulary acquisition, making the learning process more effective and motivating for students. However, future studies should explore combining this strategy with digital technologies to further enhance results. Their research highlights the potential of mimicry to make vocabulary acquisition more engaging and effective for learners.

### **Types of Vocabulary**

Understanding the different types of vocabulary such as receptive, productive, recognition, and use; is essential for developing effective teaching strategies. Receptive vocabulary refers to words people can comprehend when they read or hear them,

recognized, and understood when encountered in context, whereas productive vocabulary includes words actively used in communication by speaking and writing.

According to Faraj, (2015) receptive vocabulary encompasses a broader range of words than productive vocabulary, as recognition does not necessitate usage. And besides, recognition vocabulary is used for specialized texts and must be distinguished from everyday use vocabulary, which is regularly employed in daily interactions.

As mentioned, the challenge for educators is bridging the gap between recognition and active usage of vocabulary. Integrating methods to convert receptive knowledge into productive skills is crucial. Studies show that gamification and virtual reality (VR) can enhance vocabulary acquisition. According to Alfadil (2020), VR games greatly improve vocabulary acquisition in EFL students. Thus, educators should supplement technology with active methods and strategies tailored to boost vocabulary.

In addition, Suárez & Gesa, (2019) found that sustained exposure to captioned videos can significantly enhance vocabulary acquisition in EFL learners, highlighting the importance of incorporating multimedia tools in language education to support diverse learning needs. In my opinion, this method combines visual and auditory input, potentially accommodating different learning preferences and promoting deeper engagement with the captioned video. As such, it is another option to learn new words dosed with flipped classroom tasks looking for long-term retention of vocabulary and offering different types of opportunities for vocabulary-building.

## METHODOLOGY

In this study the research design and approach are quantitative because all data in terms of numbers are controlled and analyzed statistically. Furthermore, the depth level is descriptive by carrying out a research synthesis, explanatory and correlational since a relationship between variables is supposed to be established. Aside from that, the



instrument to be applied is a Pre-posttest and the research modality will be socio educational. To sum up, all these sources of information were needed to promote validity in the conclusions.

## **Participants**

The convenience sampling procedure was applied to this research and the sample consisted of 27 third-year students who belong to San Pio X High School in Ambato city. Amongst the 27 participants, 11 (40.74%) were female and 16 (59.26%) of them were male students.

## **Instruments**

The quantitative data source was collected by a Pre-posttest instrument to measure the effectiveness of the LMS English Attack platform in enhancing vocabulary proficiency according to the CEFR. The pre-test was administered prior to the intervention, assessing basic vocabulary knowledge through 44 questions such as 8 multiple-choice questions to test vocabulary definitions, 4 multiple-choice questions for Listening comprehension, 5 multiple-choice questions for Listening for detail, 2 multiple-choice questions for Reading for detail, 5 multiple-choice questions about Gap filling for Reading, 4 multiple-choice questions for Use of English, 8 written questions about on coded words for English usage and 8 written questions on spelling for English usage.

The above questions were designed to evaluate students' recognition and recall of vocabulary in similarity with the English Attack Platform content. Following a four-weeks intervention using the English Attack platform, a post-test identical in format to the pretest was administered to gauge improvements. The test items will specifically target vocabulary introduced and practiced through the platform's interactive activities enclosed in testing Comprehension, Listening Lab, Advanced Comprehension, Vocab Academy,

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Grammar, Swap Mania and Word Rescue games. These gamified activities are scored over 1000 points. This pre-posttest design allows for a robust comparison of vocabulary acquisition and retention, providing quantitative data on the platform's educational impact.

Vocabulary acquisition is a fundamental component of mastering the English language, supporting the development of key skills such as reading, writing, listening, and speaking. This study assesses the effectiveness of the English Attack platform, a Gamified Learning Management System (LMS), in enhancing vocabulary acquisition in alignment with the Common European Framework of Reference for Languages (CEFR). Using a pre-posttest evaluation framework scored on a gamified scale of 1000 points, this research provides a detailed analysis of students' vocabulary development and overall language proficiency, as shown below:

**Table 1.**

*Evaluation Criteria.*

| Evaluated Skills                                              | What assess                                                                     | Number of Questions | Points per Question | Total Points |
|---------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------|---------------------|--------------|
| <b>Listening</b><br>The ability to understand spoken English. | <b>Comprehension</b>                                                            | 4                   | 25                  | 100          |
| <b>Listening Detail</b>                                       | <b>for</b> The ability to capture specific information in spoken texts.         | 5                   | 20                  | 100          |
| <b>Reading Detail</b>                                         | <b>for</b> The understanding of detailed information in written texts.          | 2                   | 25                  | 50           |
| <b>Reading Filling</b>                                        | <b>Gap</b> The ability to use context to complete sentences with missing words. | 5                   | 40                  | 200          |



|                               |                                                                               |   |        |      |
|-------------------------------|-------------------------------------------------------------------------------|---|--------|------|
| <b>Grammar Rules</b>          | The knowledge of grammatical structures and rules.                            | 4 | 25     | 100  |
| <b>Grammar Scramble Words</b> | The ability to correctly order words to form grammatically correct sentences. | 8 | 25     | 200  |
| <b>Grammar Spelling</b>       | The spelling accuracy 8 and the application of spelling rules.                |   | 31.25  | 250  |
|                               |                                                                               |   | Total: | 1000 |

The vocabulary assessment within a gamified context, such as the 1000-point system rubric, provides a structured framework for evaluating learners' vocabulary proficiency. Bardakci, (2016) emphasizes the importance of assessing both the breadth and depth of vocabulary knowledge. Panmei & Waluyo, (2022) note that this rubric covers general vocabulary knowledge, contextual usage, derived forms, and collocations. Utilizing this rubric after a pre-test offers clear, objective feedback, motivating deeper engagement in vocabulary learning activities. However, the lack of real-time feedback in Nation's approach can be improved by incorporating instant feedback mechanisms.

**Table 2.**

*Vocabulary Evaluation Rubric by levels of competence in a Gamified Context.*

| Level            | Description                                                                                                                                                | Points   |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>Excellent</b> | Demonstrates extensive vocabulary knowledge, including meanings, contextual usage, derived forms, and collocations. Uses words with precision and variety. | 900-1000 |
| <b>Good</b>      | Shows solid vocabulary knowledge, correctly identifying and using words in most contexts. Manages derived forms and some collocations well.                | 700-899  |





|                     |                                                                                                                                                                               |         |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| <b>Average</b>      | Has acceptable vocabulary knowledge, understanding and using words in familiar contexts. Identifies derived forms and some collocations with less precision.                  | 500-699 |
| <b>Limited</b>      | Displays limited vocabulary knowledge, struggling to use and recognize words in diverse contexts. Basic knowledge of derived forms and collocations.                          | 300-499 |
| <b>Insufficient</b> | Shows very limited vocabulary knowledge, significant difficulties in understanding and using words outside specific contexts. No management of derived forms or collocations. | 0-299   |

**Table 3.**

*Number of Students Taking Pre-posttest*

| N | Assessed skills          | Excellent  |           | Good       |           | Average    |           | Limited    |           | Insufficient |           |
|---|--------------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|--------------|-----------|
|   |                          | Pre - Test | Post Test | Pre - Test | Post Test | Pre - Test | Post Test | Pre - Test | Post Test | Pre - Test   | Post Test |
| 1 | Listening Comprehension  | 3          | 27        | 13         | 0         | 9          | 0         | 2          | 0         | 0            | 0         |
| 2 | Listening for Detail     | 5          | 26        | 5          | 0         | 9          | 1         | 6          | 0         | 2            | 0         |
| 3 | Reading for detail       | 20         | 27        | 0          | 0         | 6          | 0         | 0          | 0         | 1            | 0         |
| 4 | Reading Gap filling      | 9          | 25        | 13         | 1         | 1          | 1         | 0          | 0         | 4            | 0         |
| 5 | Grammar - rules          | 12         | 25        | 12         | 1         | 1          | 1         | 2          | 0         | 0            | 0         |
| 6 | Grammar - scramble words | 23         | 27        | 3          | 0         | 1          | 0         | 0          | 0         | 0            | 0         |
| 7 | Grammar. Spelling        | 11         | 27        | 16         | 0         | 0          | 0         | 0          | 0         | 0            | 0         |





The data shows Pre-posttest evaluations of 27 students using the English Attack platform for learning English vocabulary. Initially, most students scored in the "Good" and "Average" categories, with few reaching "Excellent." Post-test results showed notable improvement, with most students achieving "Excellent" scores across all skills. For example, "Listening Comprehension" saw an increase from 3 to 27 students scoring "Excellent," and "Reading for Detail" from 20 to 27. These results indicate the English Attack platform significantly enhanced students' vocabulary skills.

**Table 4.**

*Percentage Scores in Pre-posttest*

| N | Assessed skills          | Excellent  |           | Good       |           | Average    |                 | Limited    |           | Insufficient |           |
|---|--------------------------|------------|-----------|------------|-----------|------------|-----------------|------------|-----------|--------------|-----------|
|   |                          | Pre - Test | Post Test | Pre - Test | Post Test | Pre - Test | Assessed skills | Pre - Test | Post Test | Pre - Test   | Post Test |
| 1 | Listening Comprehension  | 11,1       | 100       | 48,1       | 0,00      | 33,3       | 0,00            | 7,41       | 0,00      | 0,00         | 0,00      |
|   |                          | 1          |           | 5          |           | 3          |                 |            |           |              |           |
| 2 | Listening for Detail     | 18,5       | 96,3      | 18,5       | 0,00      | 33,3       | 3,70            | 22,2       | 0,00      | 7,41         | 0,00      |
|   |                          | 2          | 0         | 2          |           | 3          |                 | 2          |           |              |           |
| 3 | Reading for detail       | 74,0       | 100       | 0,00       | 0,00      | 22,2       | 0,00            | 0,00       | 0,00      | 3,70         | 0,00      |
|   |                          | 7          |           |            |           | 2          |                 |            |           |              |           |
| 4 | Reading Gap filling      | 33,3       | 92,5      | 48,1       | 3,70      | 3,70       | 3,70            | 0,00       | 0,00      | 14,8         | 0,00      |
|   |                          | 3          | 9         | 5          |           |            |                 |            |           | 1            |           |
| 5 | Grammar - rules          | 44,4       | 92,5      | 44,4       | 3,70      | 3,70       | 3,70            | 7,41       | 0,00      | 0,00         | 0,00      |
|   |                          | 4          | 9         | 4          |           |            |                 |            |           |              |           |
| 6 | Grammar - scramble words | 85,1       | 100       | 11,1       | 0,00      | 3,70       | 0,00            | 0,00       | 0,00      | 0,00         | 0,00      |
|   |                          | 9          |           | 1          |           |            |                 |            |           |              |           |

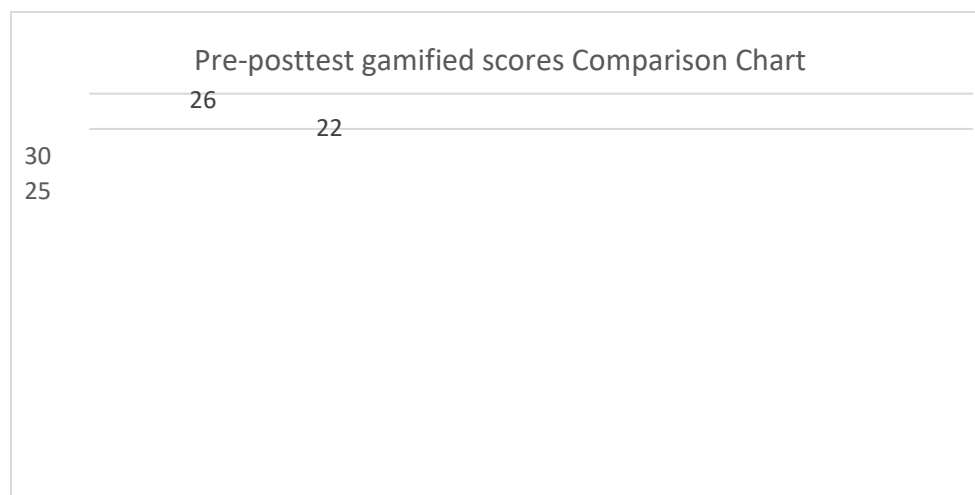


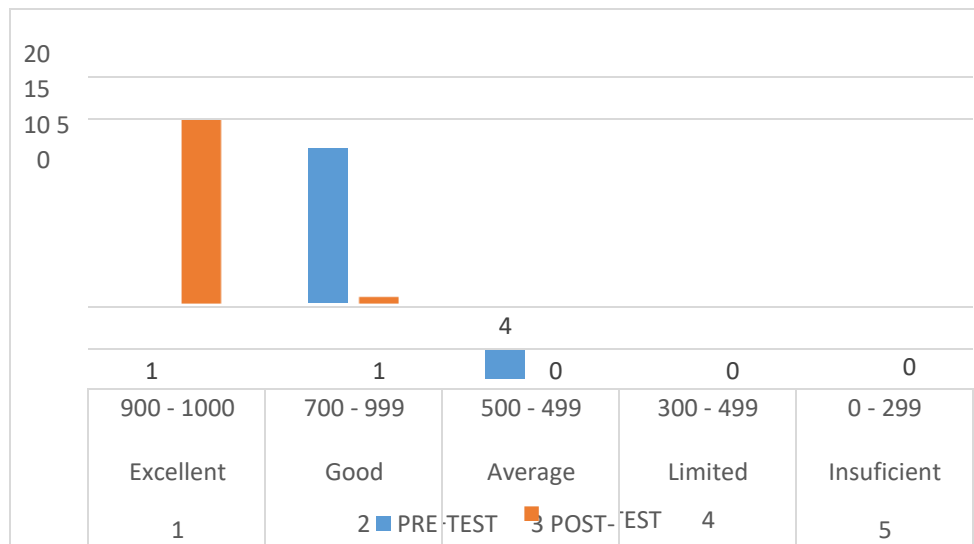
|            |      |     |      |      |      |      |      |      |      |      |
|------------|------|-----|------|------|------|------|------|------|------|------|
| 7 Grammar. | 40,7 | 100 | 59,2 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Spelling   | 4    |     | 6    |      |      |      |      |      |      |      |

The data displays the percentage distribution of students' grades across performance categories in pre-posttest evaluations using the English Attack platform for English vocabulary learning Waer, (2021) Initially, students mostly fell into "Good" and "Average" categories. Post-test results showed dramatic improvement, with a significant rise in the "Excellent" category for all skills. For instance, "Listening Comprehension" and "Reading for Detail" both jumped to 100% in the "Excellent" category. "Grammar - scramble words" also improved from 85.2% to 100%. These results indicate the English Attack platform significantly enhanced students' vocabulary skills and language proficiency.

### Chart 1.

*Number of Students by Gamified Score Categories in Pre-posttest*





The data shows the number of students categorized by their gamified scores out of 1000 in Pre-posttest evaluations using the English Attack platform for English vocabulary learning. In the pretest, the majority of students fell into the "Good" category (22 students), with only one student achieving an "Excellent" score, and four students in the "Average" category. Posttest results indicated a dramatic improvement, with 26 students reaching the "Excellent" category and only one student in the "Good" category, and no students in the lower categories.

### Effectiveness of the English Attack Platform According to CEFR Standards:

**Substantial Increase in High Performers:** The number of students scoring in the "Excellent" category (900-1000 points) increased from 1 to 26.

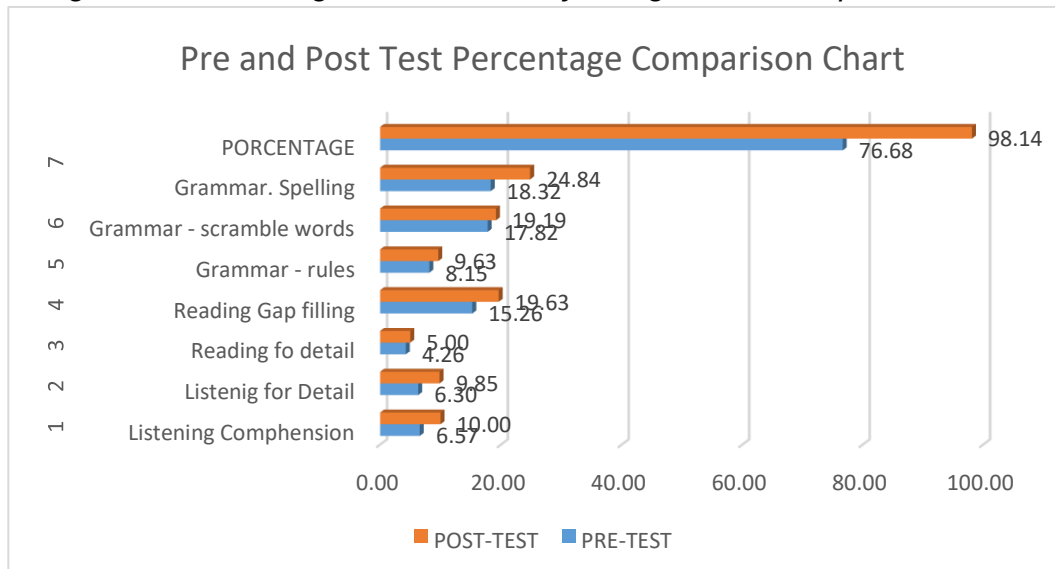
**Improvement Across All Levels:** No students remained in the "Average," "Limited," or "Insufficient" categories posttest, showing a significant overall improvement.

**Enhanced Vocabulary Acquisition:** The shift from predominantly "Good" pretest scores to "Excellent" posttest scores indicates that the platform effectively enhances vocabulary acquisition.

**Alignment with CEFR Goals:** The improvement reflects the platform's success in meeting CEFR standards for high school students in Ecuador, demonstrating its effectiveness in advancing students' English proficiency levels.

## Chart 2.

*Percentage distribution of gamified scores by categories in Pre-post test*



The data shows percentage results from Pre-posttest evaluations using the English Attack platform for English vocabulary learning. Pretest results varied, with "Grammar - Spelling" at 18.32% and "Reading for Detail" at 4.26%. Posttest results showed significant improvement, with "Grammar - Spelling" increasing to 24.84% and "Listening Comprehension" from 6.57% to 10%. The overall percentage of high-scoring students rose from 76.68% to 98.14%, indicating substantial gains in vocabulary proficiency.

## RESULTS

The Statistical Package for Social Studies (SPSS) software, which is a data editor used for complex statistical analysis, tabulation with central trend measurements and trend frequency analysis, was applied to analyze the results obtained after applying a pretest on vocabulary knowledge to third-year high school students from San Pio X in Ambato, Ecuador. Additionally, it is important to mention the use of this software to validate and process data accurately, using a gamified scale of 1000 points. **SPSS**

### Results for Pre-Test – Statistical Frequencies

```
FREQUENCIES VARIABLES=Total1
/STATISTICS=MEAN MEDIAN MODE
/BARCHART FREQ
/ORDER=ANALYSIS.
```

| Total1 |       |        |
|--------|-------|--------|
| N      | Valid | 27     |
|        | Lost  | 0      |
| Mean   |       | 766,83 |
| Median |       | 813,00 |
| Mode   |       | 839,00 |

Source: SPSS Software for Statistical Analysis

SPSS calculated the central trend measurements: Mean, Median, and Mode. The Mean score of 766.83 reflects average student performance, while the Median score of 813 shows that half scored below and half above this value. The Mode of 839 was the most frequent score. These results indicate a need for targeted interventions to help students below the median. Ensuring comprehensive data collection and addressing variability will enhance future assessment accuracy and support effective educational strategies.

The results of this quantitative research study on the effectiveness of the English



Attack LMS Platform for English vocabulary learning, based on the Common European Framework of Reference for Languages (CEFR), have been tested among third-year San Pio X High School students. The findings indicate a significant improvement in vocabulary acquisition, with students demonstrating progress from B1 to B2 levels. This improvement aligns with the CEFR standards, showcasing the platform's effectiveness in enhancing vocabulary retention and usage. Specifically, students who engaged with English Attack showed a 21.46% increase in their vocabulary test scores compared to those using traditional methods. These results highlight the potential of gamification in educational settings to foster better language learning outcomes.

Based on the data analysis, the effectiveness of the English Attack Platform According to CEFR Standards is showed:

**Enhanced Overall Performance:** The total percentage of students scoring high increased from 76.68% to 98.14%.

**Improvement in Specific Skills:** Notable improvements in individual skills, such as "Grammar - Spelling" from 18.32% to 24.84%.

**Balanced Skill Development:** Consistent gains across all assessed skills, indicating comprehensive vocabulary acquisition.

**Alignment with CEFR Goals:** The significant improvement in scores demonstrates the platform's effectiveness in meeting the CEFR standards for high school students in Ecuador.

## CONCLUSIONS

The findings from this research reveal that the English Attack platform significantly enhances vocabulary acquisition among students, aligning with CEFR standards. Specifically, third-year students at San Pio X High School demonstrated substantial

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improvement in their English vocabulary, progressing from B1 to B2 level. This advancement is supported by a 21.46% increase in vocabulary test scores among those using English Attack compared to those employing traditional methods. The data underscores the platform's efficacy in facilitating vocabulary retention and usage, with an overall increase in high-performing students from 76.68% to 98.14%. Such results highlight the potential of integrating gamification and interactive content in educational settings to foster improved language learning outcomes.

In conclusion, the English Attack platform has proven to be a highly effective tool for enhancing English vocabulary among high school students. The significant improvements observed in specific skills, such as grammar and spelling, coupled with balanced gains across all assessed areas, demonstrate the platform's capability to support comprehensive language acquisition. By aligning with CEFR goals, English Attack not only boosts vocabulary proficiency but also enhances overall language competence. This study advocates for the broader adoption of interactive and innovative educational tools like English Attack to promote substantial improvements in students' English proficiency, thereby preparing them better for both academic and professional environments.

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