Impact of a Gamified Strategy in Language and Literature Among First-Year Upper-Secondary Students

Impacto de una estrategia de gamificación en Lengua y Literatura en primer año de bachillerato

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ABSTRACT

The integration of gamified dynamics into the teaching of the humanities revitalizes the learning process and strengthens communicative competencies. This study aimed to evaluate the effectiveness of a gamified teaching strategy in first-year upper-secondary students enrolled in Language and Literature at the Unidad Educativa Fiscomisional Técnica "Pacífico Cembranos" of the Bolivarian University of Ecuador. A quantitative, quasi-experimental design was used, with one control and one experimental group of 35 students each. Results showed that the gamified strategy, the Poetry of Emotions Workshop, significantly improved academic performance. The experimental group consistently outperformed the control group, with mean differences exceeding 3 points (p < .001) and lower variability (SD = 0.867–1.086 vs. 0.857–1.733). It also increased the minimum performance level (7.00 vs. 2.00) and showed superior results on the final assessment (8.66 vs. 6.83, U = 135, p < .001), confirming its effectiveness in optimizing learning outcomes and promoting educational equity.

Keywords: Language teaching; Educational equity; Gamification; Academic performance; Educational technology.

RESUMEN

La integración de dinámicas lúdicas en la enseñanza de las humanidades revitaliza el proceso de aprendizaje y fortalece las competencias comunicativas. El propósito del presente artículo fue evaluar la efectividad de una estrategia didáctica gamificada en estudiantes de primer año de Bachillerato en Lengua y Literatura de la Unidad Educativa Fiscomisional Técnica "Pacífico Cembranos" de la Universidad Bolivariana del Ecuador. Se utilizó un enfoque cuantitativo con un diseño cuasi-experimental, aplicado a un grupo control y otro experimental de 35 participantes cada uno. Los resultados mostraron que la estrategia gamificada "Taller de las Poesías de las Emociones" mejoró significativamente el rendimiento en las materias estudiadas. El grupo experimental superó consistentemente al control, con diferencias de más de 3 puntos en las medias (p < .001) y menor dispersión (DE: 0.867-1.086 vs 0.857-1.733). Además, elevó el rendimiento mínimo (7.00 vs 2.00) y mostró superioridad en la evaluación final (8.66 vs 6.83, U=135, p<.001), confirmando su efectividad para optimizar resultados y promover equidad educativa.

Palabras clave: Didáctica de la lengua; Equidad educativa; Gamificación; Rendimiento académico; Tecnología educativa

INTRODUCTION

Since the dawn of civilization, games have served as a fundamental mechanism for learning, socialization, and exploration. In contemporary times, this ancestral principle has found a new landscape in the digital realm, giving rise to gamification, understood as the incorporation of game-design elements into non-game contexts. Within education, gamification has emerged as a powerful tool for reconnecting with digital-native students whose cognitive profiles and interests often diverge from traditional pedagogical models (Belduma et al., 2025).

Gamification transcends point scoring and badge collection; it represents a pedagogical paradigm that fosters intrinsic motivation, encourages perseverance through progressive challenges, and facilitates meaningful, immersive learning experiences (Chávez et al., 2025). In this context, Language and Literature—an essential pillar in developing critical thinking and aesthetic sensitivity—finds an unprecedented opportunity to renew its instructional approach and align its content with the lived realities of 21st-century learners (Báez et al., 2025).

Language and literature education at the upper-secondary level faces the dual challenge of consolidating essential competencies for university access while nurturing a deep appreciation for the artistic and cultural value of literary expression. However, a persistent gap often exists between classical texts and adolescents' lived experiences, leading to disengagement, low motivation, and underperformance relative to their actual potential (Changoluisa et al., 2024).

Specifically, in the first year of upper-secondary education—where foundational skills for future coursework are established—poetry, a literary genre that distills human emotions, is frequently reduced to formal or historical analysis. This neglects its potential to resonate with adolescents' emotional worlds. Such disconnection underscores the need for innovative methodologies that not only transmit knowledge but also forge affective and experiential bridges between students and poetic texts (Manning, 2017).

Integrating poetic content into a playful, digital environment emerges as a highly pertinent strategy. Gamifying poetry learning allows students to interact with verses, decode metaphors, explore rhythms, and uncover layered meanings through experimentation and challenge-solving. This shift transforms passive content reception into active meaning construction while simultaneously fostering emotional education, empathy, and creativity—key competencies for holistic development (Tahir et al., 2025).

Adolescents are in a stage of identity formation and emotional exploration; poetry, when properly mediated, can serve as both a mirror and a refuge. Gamification, by offering a structured, safe space for exploration, mitigates the intimidation or perceived abstraction of poetry while reducing academic anxiety through

immediate rewards and interactive narratives (Jędrzejczak, 2024).

Nevertheless, implementing gamification entails significant challenges. First, there is the risk of superficial gamification, where game elements are added without pedagogical coherence, resulting in empty or demotivating experiences. Second, instructional design becomes a critical factor, requiring teachers trained to create or curate gamified experiences that balance playfulness with academic rigor (Klein, 2021). Third, assessment poses difficulties, as it must measure both factual knowledge and soft skills such as collaboration, creativity, and emotional intelligence. Finally, the digital divide and technology saturation among youth require careful reflection to ensure technology functions as a pedagogical means rather than an end (Altomari et al., 2023).

These challenges lead to essential research questions:

Does implementing a gamified strategy in the Language and Literature classroom significantly improve first-year upper-secondary students' academic performance?

To what extent does it promote a more equitable distribution of learning outcomes, reducing gaps among students with differing initial skill levels?

Given this context, the present study aimed to evaluate the effectiveness of a gamified strategy for first-year Language and Literature students at the Unidad Educativa Fiscomisional Técnica "Pacífico Cembranos".

METHOD

This study employed a quantitative, quasi-experimental design, with an experimental group receiving a gamified pedagogical intervention and a control group receiving traditional instruction.

Population and Sample

The sample consisted of 70 first-year upper-secondary students, divided into two parallel groups (A and B). Using a convenience sampling approach, both groups (n = 35 each) were included, prioritizing feasibility and practical applicability over statistical generalization.

Instruments

Student performance on activities within the gamified proposal was measured using an analytic rubric.

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Table 1. *Analytic Rubric for Evaluating the Activities*

Criteria	Excellent (2 points)	Good (1.5 points)	Satisfactory (1 point)	Insufficient (0.5 points)
Participation and Engagement	Actively participates in all activities, showing strong commitment.	Participates in most activities with adequate commitment.	Limited participation but completes assigned tasks.	Minimal participation; does not complete tasks.
Quality of Responses	Responds with depth and creativity; shows full understanding.	Responds adequately but with limited detail.	Basic responses showing partial understanding.	Incorrect or incomplete responses showing lack of understanding.
Use of Digital Resources	Uses digital tools efficiently and adapts well to platforms.	Uses tools adequately with some difficulty.	Limited tool use; noticeable challenges.	Does not use or struggles significantly with tools.
Reflection and Critical Thinking	Provides deep, well-founded reflection.	Provides adequate reflection with limited depth.	Superficial reflection with limited critical thinking.	No reflection or extremely superficial.
Timeliness	Submits all tasks on time.	Submits tasks late without affecting learning.	Frequently late; impacts course flow.	Does not submit or submits excessively late.

Procedures

Both groups completed four formative tasks and one final assessment. The control group completed activities from the official Language and Literature textbook.The experimental group completed the gamified intervention "Poetry of Emotions Workshop" developed on Google Sites.

The five-week intervention incorporated gamified tools (Kahoot, Educaplay, Quizizz, Liveworksheet, Google Forms) within an emotional narrative framework. Access was facilitated through QR codes.

Data Processing

Descriptive statistics (mean, median, SD, range) were computed. Normality was tested using the Shapiro–Wilk test, which indicated non-normality ($p < .05$), validating the use of the Mann–Whitney U test. Analyses were conducted using Jamovi 1.6.

RESULTS

The results obtained from the statistical analysis of the data are presented below, organized into two main sections. The first corresponds to the descriptive analysis of the study variables, which includes measures of central tendency and dispersion for both groups. The second section comprises the inferential analysis, in which the hypotheses are tested using the nonparametric Mann–Whitney U test to determine whether there are statistically significant differences in academic performance between the control and experimental groups.

Table 2 presents the descriptive statistics and the results of the Shapiro–Wilk normality test for the four tasks evaluated, disaggregated by control group (CG) and experimental group (EG). First, a substantial and consistent difference in performance between the two groups is observed across all tasks. The mean scores of the experimental group (EG1: 8.76, EG2: 8.96, EG3: 9.27, EG4: 8.83) are notably higher than those of the control group (CG1: 5.26, CG2: 5.67, CG3: 5.52, CG4: 5.79). This performance gap, exceeding three points on a 0–10 scale in each task, suggests a preliminary positive effect of the gamified intervention.

Regarding data dispersion, the experimental group not only achieved higher scores but also more homogeneous results. This is reflected in their considerably lower standard deviations (SDs), ranging from 0.867 to 1.086, compared to those of the control group (0.857 to 1.733). The lower variability in the EG indicates that the gamified strategy was effective for most students, raising overall performance and reducing heterogeneity in outcomes. In addition, the minimum and maximum values reinforce this trend: while the control group shows very low minimum scores (as low as 2.00) and maximum scores that only exceptionally reach excellence, the experimental group starts from a higher baseline (a minimum of 7.00 in all tasks) and consistently reaches maximum scores of 10.00.

Regarding the normality assumption, the Shapiro–Wilk test results are conclusive. For the experimental group, all p-values are below .001 ($p < .001$), leading to a clear rejection of the null hypothesis of normality. In the control

group, three of the four tasks (T1, T2, T3) also exhibit non-normal distributions (p < .05). Only Task 4 in the control group (CG4) shows a p-value of .133, suggesting that its data may follow a normal distribution. Nevertheless, the predominantly nonparametric nature of the data in both groups statistically validates the methodological decision to apply the Mann–Whitney U test for the subsequent inferential analysis.

The marked and consistent superiority of the mean scores, together with the lower dispersion observed in the experimental group, suggests that gamification is not only an effective strategy for increasing average academic performance but also for promoting greater equity in learning outcomes by narrowing the gap between students with different initial skill levels. This positions gamification not merely as a motivational resource, but as a powerful pedagogical tool capable of generating substantial and generalizable improvements in the mastery of Language and Literature content.

Table 2. *Descriptive Statistics for the Tasks: Control Group vs. Experimental Group*

Task	Group	Mean	Median	SD	Min	Max	Shapiro–Wilk W	p
Task 1	Control	5.26	5.00	1.120	3.00	7.00	0.869	< .001
	Experimental	8.76	9.00	1.086	7.00	10.00	0.864	< .001
Task 2	Control	5.67	6.00	0.857	3.50	7.50	0.878	.001
	Experimental	8.96	9.00	1.014	7.00	10.00	0.852	< .001
Task 3	Control	5.52	6.00	1.390	2.00	9.00	0.916	.011
	Experimental	9.27	9.50	0.867	7.00	10.00	0.803	< .001
Task 4	Control	5.79	5.75	1.733	2.00	10.00	0.952	.133
	Experimental	8.83	9.00	1.065	7.00	10.00	0.86	< .001

The descriptive analysis of the results, represented in Figure 1 through violin plots combined with box-and-whisker diagrams for each of the four tasks, provides a robust visualization of the substantial differences in performance between the control group (CG) and the experimental group (EG). The violin plots for the EG, presumably taller and narrower in the region of high scores (close to 10), indicate not only a higher mean but also a more homogeneous distribution concentrated around excellence-level scores. This suggests that the gamified intervention "Workshop on the Poetry of Emotions" not only increased average performance but also clustered most students at a high, consistent level of achievement. In contrast, the violin shape of the CG, likely wider, flatter, and shifted to the left (lower scores), would reflect greater variability and a concentration of students within a medium–low performance range, which is typical of traditional instruction where outcomes tend to be more dispersed.

The overlap of the box plots allows for a precise reading of key metrics. The median (the line inside the box) of the EG is expected to be consistently higher than that of the CG across tasks, corroborating the central advantage of the intervention group. Furthermore, the position of the EG box (representing the interquartile range, IQR) in the upper region of the scale, together with shorter whiskers, visually supports the conclusion of lower dispersion and the absence of extremely low values. For the CG, the box is likely located in the middle range, with

longer whiskers extending toward significantly lower minimum scores. This visual disparity in the location, dispersion, and shape of the distributions provides strong graphical support for the inferential analysis, highlighting the positive impact of gamification on consolidating more uniform, higher-quality learning.

Finally, the evolution of the shapes of the violins and boxes across the four tasks may reveal temporal patterns in the effect of the intervention. For example, if the EG violin becomes progressively taller and narrower in successive tasks, this would indicate that students not only responded positively from the outset but also adapted to and consolidated their learning within the gamified environment, achieving a more solid and consistent mastery of poetic content. This longitudinal perspective, evident in the sequence of plots, enriches the analysis by demonstrating that gamification fostered a trajectory of continuous improvement and performance stabilization, in contrast to the possible fluctuations or stagnation observed in the control group.

Figura 1. *Descriptive analysis using violin plots and box-and-whisker diagrams of the control versus experimental tasks*
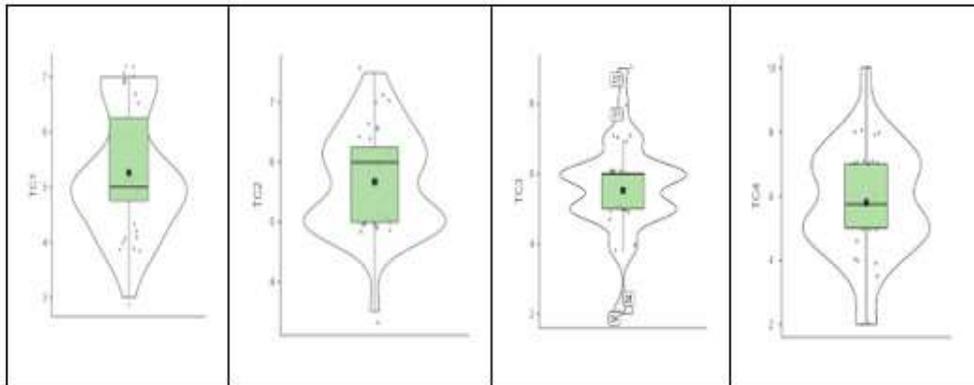

Table 3 presents the results of the Mann–Whitney U test, applied to compare the score distributions between the control group (CG) and the experimental group (EG) for each of the four tasks. The findings confirm statistically significant differences between the two groups. The U statistic values, notably low across all tasks (Task 1: U = 21; Task 2: U = 7.5; Task 3: U = 19.5; Task 4: U = 89.5), indicate a clear superiority in the experimental group's score ranks. This interpretation is supported by the test's logic: a U value close to zero suggests minimal overlap between distributions, with most scores from one group (in this case, the EG) consistently exceeding those of the other group.

The statistical significance of these findings is extreme, as evidenced by the p-values, all of which are below .001 (p < .001). This threshold, well below the conventional significance level of $\alpha = .05$, provides robust evidence for rejecting the null hypothesis (H_0) that the group medians are equal. It is

important to note that although the test is rank-based and compares the distributions as a whole, the alternative hypothesis (H_a: $\mu CG \neq \mu EG$) formulated in the study indicates a specific direction of the difference: the experimental group achieved significantly higher median scores. The consistency of this result across all four tasks reinforces the reliability of the observed effect, ruling out the possibility that it represents an isolated or chance finding.

It should be noted that although the U value for Task 4 (89.5) is higher than those for the first three tasks—potentially suggesting a lower degree of separation between groups—the corresponding p-value remains maximally significant (p < .001). This indicates that, despite a possible slight convergence in performance or greater variability in this final task, the difference in favor of the experimental group remains statistically robust and not attributable to chance.

The implications of these results are decisive for the study. They provide strong evidence that the gamified pedagogical strategy implemented in the experimental group had a positive, statistically significant, and consistent impact on students' academic performance in Language and Literature. The magnitude and significance of the observed differences not only validate the effectiveness of gamification as a learning tool but also establish a clear causal relationship between the intervention and improved outcomes, thereby supporting the study's central hypothesis regarding the superiority of this method over traditional instruction.

Table 3. *Results of the Mann–Whitney U test comparing scores between groups across the four tasks*

		Statistic	p
Task 1	Mann-Whitney U	21	< .001
Task 2	Mann-Whitney U	7.5	< .001
Task 3	Mann-Whitney U	19.5	< .001
Task 4	Mann-Whitney U	89.5	< .001

Note. $H_a \, \mu \, TC \neq \mu \, TE$

Table 4 presents a statistically robust contrast between the final assessment results of the control group (FA-C) and the experimental group (FA-E). First, a notable difference in central performance between the two groups is confirmed: the experimental group's mean (8.66) exceeds the control group's (6.83) by nearly 2 points. In contrast, the median of the experimental group (9) is two points higher than that of the control group (7). This gap in measures of central tendency consistently reflects the positive impact of the gamified intervention on final academic performance.

Regarding data dispersion, both groups show a relatively low standard deviation (FA-C: 0.905; FA-E: 1.081), indicating homogeneity of results within each group. However, the analysis of extreme values reveals a crucial difference: while the control group has a minimum of 5 and a maximum of 10, the experimental group raises its minimum score to 7 while maintaining the maximum at 10. This finding suggests that gamification not only improved average performance but also significantly reduced the likelihood of low outcomes, functioning as an academic leveling

factor.

Shapiro–Wilk test results for both groups (FA-C: W = 0.863, p < .001; FA-E: W = 0.875, p < .001) confirm a nonparametric distribution of the data, thereby validating the use of nonparametric statistical tests, such as the Mann–Whitney U test, for inferential analysis. The violation of the normality assumption in both groups further supports the appropriateness of the statistical methodology employed in the study.

The evidence shows that implementing gamification not only produced a substantial improvement in average academic performance but also constituted an effective strategy for raising the minimum learning threshold, thereby reducing the gap between students with different initial skill levels. This positions gamification as a pedagogical tool capable of simultaneously optimizing high-achievement outcomes and ensuring a more equitable learning baseline, transcending its role as a merely motivational resource to become a valid instrument for academic leveling and systemic improvement in learning achievements.

Table 4. Descriptive statistics of final assessments: control vs. experimental group Shapiro–Wilk

	Group	Mean	Median	SD	Minimum	Maximum	W	p
Note	FA-C	6.83	7	0.905	5	10	0.863	< .001
	FA-E	8.66	9	1.081	7	10	0.875	< .001

When analyzing the distribution of final assessment grades, the control group shows a predominant concentration of scores in the intermediate range, with secondary modes at lower values. In contrast, the distribution of the experimental group shifts markedly toward the high-performance zone, with pronounced density in the 9 and 10 out of 10 ranges. This visual pattern confirms a clear tendency toward significantly higher grades in the intervention group. Moreover, both distributions exhibit non-symmetric shapes, corroborating the lack of normality in the data, previously established

through the Shapiro–Wilk test (Table 4).

Table 5 presents the results of the Mann–Whitney U test applied to the final assessment scores between the control group (FA-C) and the experimental group (FA-E). The obtained U statistic (U = 135) is considerably low relative to the total sample size (N = 70), providing an initial robust indication of significant differences in the score distributions of the two groups. A low U value indicates that the experimental group's ranks are systematically higher than those of the control group, confirming the trend observed in the descriptive

analysis.

The statistical significance of this result is extreme, with p < .001. This level of significance, well below the conventional $\alpha = .05$ threshold, provides strong evidence for rejecting the null hypothesis (H_0) that the group medians are equal. The alternative hypothesis (H_a: $\mu FA\text{-}C \neq \mu FA\text{-}E$) is supported, indicating that the median of the experimental group is statistically different (and, in context, higher) than that of the control group. This finding is consistent with the results of the individual tasks and further consolidates the validity of the intervention effect at the summative evaluation level.

Table 5. *Mann–Whitney U Test for Independent Samples Related to the Assessments*

	Statistic	p
Note	Mann–Whitney U	135

The statistical confirmation of a highly significant difference in the final assessment demonstrates that the impact of gamification extends beyond performance in specific formative activities and becomes consolidated in a summative assessment of learning. This implies that the gamified strategy not only motivates or improves performance on isolated tasks but also facilitates a deeper, more transferable assimilation of content, resulting in substantial, measurable improvements in learning outcomes at the end of the instructional process.

DISCUSSION

The results of this study, which demonstrate a positive, significant, and generalized impact of gamification on academic performance and classroom equity in Language and Literature, do not exist in isolation. Their analysis and interpretation are enriched when contrasted with the body of prior research, allowing for the identification of both convergences that strengthen existing theories and particularities that nuance the understanding of this educational phenomenon. The findings are discussed below in light of recent scientific literature, establishing a critical dialogue between what was observed in the "Workshop on the Poetry of Emotions" intervention and what has been reported by other authors in similar contexts.

Effectiveness in Improving Academic Performance: A Strong Corroboration

The marked superiority of the experimental group, with mean differences of more than 3 points on the specific tasks (5.52 vs. 9.27 in Task 3) and nearly 2 points on the final assessment (6.83 vs. 8.66), aligns with a broad body of evidence supporting the effectiveness of gamification. These findings corroborate those of Cárdenas et al. (2025) and Castañeda

(2025), whose meta-analysis concluded that gamified elements—particularly those that enhance autonomy and feedback—have significant positive effects on students' cognitive and motivational performance. Likewise, the results are consistent with studies conducted specifically in the language domain, such as that of Carmona et al. (2025), who observed notable improvements in reading and writing competence through game-based dynamics.

However, the present study goes beyond merely providing empirical evidence by demonstrating exceptional consistency across four consecutive tasks and a summative assessment, as reflected in extremely low and significant Mann–Whitney U values (U = 7.5-21, p < .001 for the first three tasks). This consistency strengthens the position against studies with more ambiguous results, such as Rodrigues et al. (2022), who warned of potential adverse long-term effects of gamification due to novelty loss. The data from this research, showing sustained and even slightly increasing performance (from 8.76 in T1 to 9.27 in T3), suggest that a pedagogically sound design, centered on emotion and narrative, can mitigate this "fade-out effect."

Homogenization of Results and Equity: The Leveling Role of Gamification

One of the most significant findings of this research goes beyond average improvement and promotes equity. The reduction in standard deviation in the experimental group (SD between 0.867 and 1.081) compared to the control group (SD between 0.857 and 1.733),

together with the substantial increase in the minimum performance threshold (from 2.00/5.00 in the CG to 7.00 in the EG across all measurements), positions gamification as a leveling tool. This result is critical and finds strong support in the findings of Ahma and Kadriu (2025), who argue that gamification can provide multiple pathways to success and personalized scaffolding, disproportionately benefiting students with greater learning difficulties. It also aligns with the results of Costantini et al. (2025), who observed that playful environments reduce anxiety related to failure, enabling students to participate more actively and view errors as part of the learning process, leading to more compact and elevated outcome distributions.

The patterns visualized in the violin plots, suggesting a taller and narrower distribution for the experimental group in the excellence range, provide robust empirical evidence for this idea. This homogenizing effect contrasts with some criticisms by Kwon and Özpolat (2021) and Michinov and Michinov (2025), who argue that gamification may exacerbate unhealthy competition or primarily benefit highly competitive students. The present study, by demonstrating an apparent reduction in the achievement gap, suggests that when gamification is focused on mastery and collaboration—as appears to be the case in the "Workshop on the Poetry of Emotions"—it becomes a powerful instrument for educational inclusion.

Consolidation of Long-Term Learning: From Motivational Reinforcement to Deep Assimilation

The statistically significant difference in favor of the experimental group in the final assessment (U = 135, p < .001) is perhaps one of the most relevant findings for educational practice, as it indicates that the benefits of gamification are not limited to immediate or formative tasks, but transfer to a summative assessment of knowledge. This implies a deeper and more durable assimilation of content. This finding is consistent with those of Li et al. (2024), suggesting that gamification, by satisfying needs for competence, autonomy, and relatedness, likely fostered stronger intrinsic motivation, leading to more meaningful learning. It also aligns with Paredes et al. (2024), who found that students in gamified environments demonstrated better information retention in subsequent assessments.

This study provides specific evidence within the domain of Language and Literature, suggesting that the emotional and narrative engagement inherent in gamification facilitates a deeper connection with abstract content such as poetry, resulting in improved performance on a comprehensive evaluation. This distinguishes the observed impact from gamified interventions that focus solely on point and badge mechanics, whose effects tend to be more superficial and short-lived.

The discussion of these results aligns closely with the mainstream body of research supporting the benefits of gamification, while also offering important nuances. The findings are consistent with Witoszek (2023) and Capatina et al. (2024) regarding effectiveness in improving performance and its homogenizing and leveling potential. Ultimately, the comparison with the present study's findings reinforces, from a humanities perspective, the thesis that well-designed gamification transcends situational motivation to catalyze deep, transferable knowledge assimilation.

CONCLUSIONS

The results of this study conclusively demonstrate that implementing the gamified strategy "Workshop on the Poetry of Emotions" produced a substantial and statistically significant improvement in students' academic performance in Language and Literature at the Fiscomisional Technical Educational Unit "Pacífico Cembranos" of the Universidad Bolivariana del Ecuador. This superiority of the experimental group over the control group was consistently evident across all evaluated tasks, with mean differences exceeding three points on a 0–10 scale. The magnitude of this difference is confirmed by the Mann–Whitney U test, whose exceptionally low values (Task 2: U = 7.5; Task 3: U = 19.5) and extreme statistical significance (p < .001 in all tasks) allow for rejection of the null hypothesis and support the conclusion that the gamified intervention constitutes a determining variable in improving learning outcomes.

Beyond improving average performance, gamification proved an effective tool for homogenizing results and promoting greater

equity in the classroom. The experimental group not only achieved higher mean scores but also exhibited markedly lower dispersion, with standard deviations ranging from 0.867 to 1.086, compared to the control group, whose standard deviations ranged from 0.857 to 1.733. The analysis of minimum values further reinforces this pattern: while the control group recorded scores as low as 2.00, the experimental group raised the minimum performance threshold to 7.00 across all tasks. This indicates that the intervention was adequate for the majority of students, narrowing the gap between different initial skill levels and ensuring more uniform learning.

The positive impact of gamification was not limited to specific formative activities but was consolidated in the final summative assessment. The experimental group achieved a mean score of 8.66 and a median of 9 in this evaluation, clearly outperforming the control group, which obtained a mean of 6.83 and a median of 7. The Mann–Whitney U test applied to these data ($U = 135$, $p < .001$) confirms that this difference is highly significant. This finding suggests that gamification facilitates a deeper, more transferable assimilation of content, resulting in measurable, substantial improvements in learning outcomes at the end of the instructional process.

The nonparametric nature of the data, confirmed by the Shapiro–Wilk test (with p-values < .001 in most cases, including TE1–TE4 and EV-E), statistically justified the use of the Mann–Whitney U test for inferential analysis. The consistency of the results across the four tasks and the final assessment, together with the explicit directionality of the differences, which always favor the experimental group, reinforces the reliability of the findings and establishes a clear causal relationship between the gamified intervention and the observed improvement in academic performance.

In conclusion, this study positions gamification not merely as a motivational resource, but as a powerful pedagogical tool with a dual benefit: optimizing high-level achievement outcomes while simultaneously raising the minimum level of learning. The strategy's capacity to generate substantial, generalizable, and equitable improvements in mastery of Language and Literature content makes it a valid and effective instrument for academic leveling and the systemic enhancement of learning achievements across diverse educational contexts.

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