

## The use of Gamification for English language assessment in Higher Education: an innovative perspective / *A utilização do Gamification para a avaliação de língua inglesa no contexto do Ensino Superior: uma perspectiva inovadora*


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#### **ABSTRACT**

Assessment within the context of Higher Education plays a pivotal role in the educational process, as its main objective is to gauge students' progress and knowledge acquisition. However, traditional assessment approaches are often perceived as monotonous and demotivating, leading to a lack of engagement and unsatisfactory outcomes. In the era of Digital Technology, which brings forth new perspectives across various aspects of human life, Gamification emerges as an innovative proposal capable of transforming educational practices. This article aims to analyze the effects of Gamification on the assessment of English language teaching and learning in Higher Education. Methodologically, we conducted a quantitative and qualitative descriptive study, employing a case study approach. The research involved two sixth-semester undergraduate students majoring in Portuguese and English at an institution of Higher Education in Recife. Additionally, a participating English language professor and ten randomly selected English language teachers were interviewed through semi-structured digital interviews. Our strategies encompassed: (i) observation of sixth-semester English language classes, (ii) conducting semi-structured interviews with both students and teachers of English, (iii) development of the Gamified Assessment, (iv) implementation of the Gamified Assessment during the Teaching and Learning process, and (v) conducting follow-up semi-structured interviews with students after the conclusion of the Gamified Assessment. The results confirm the effectiveness of the Gamified Assessment in enhancing English language teaching, learning, and evaluation in Higher Education.

**KEYWORDS:** Teaching and Learning; Gamified Assessment; Digital Technologies; Gamification; English Language.

#### **RESUMO**

*A avaliação no contexto do Ensino Superior desempenha um papel fundamental no processo educativo, pois tem como objetivo medir o progresso e a aquisição dos conhecimentos por parte dos estudantes. Entretanto, as abordagens tradicionais de avaliação, muitas vezes, são percebidas como monótonas e desmotivadoras, resultando em uma falta de engajamento e em resultados insatisfatórios. Nesse cenário em que a Era Digital traz novas perspectivas em quase todas as áreas na rotina da humanidade, surge, então, o Gamification como uma proposta inovadora capaz de transformar práticas educacionais. Neste artigo, portanto, o nosso objetivo é analisar os efeitos do Gamification na avaliação do ensino e aprendizagem da Língua Inglesa no Ensino Superior. Metodologicamente, realizamos uma pesquisa quanti-quali e descritiva, utilizando o estudo de caso como abordagem. Participaram da pesquisa dois discentes do curso de Letras - sexto período, Português e Inglês, de uma instituição de Ensino Superior na cidade do Recife. Além disso, contamos com a participação de um professor de inglês da referida instituição e entrevistamos dez professores de inglês, randomicamente, por meio de entrevistas semiestruturadas realizadas em meio digital. Dessa forma, utilizamos as seguintes estratégias: (i) observação das aulas de Língua Inglesa do sexto período; (ii) realização de entrevistas semiestruturadas com os discentes e docentes de Língua Inglesa; (iii) construção da Avaliação Gamificada; (iv) aplicação*

da Avaliação Gamificada em TDM; (v) realização de uma nova entrevista semiestruturada com os discentes após a conclusão da Avaliação Gamificada. Nossos resultados atestam a eficácia da Avaliação Gamificada para o ensino, a aprendizagem e a avaliação de Língua Inglesa no Ensino Superior.

**PALAVRAS-CHAVE:** Ensino-aprendizagem; Avaliação Gamificada; Tecnologias Digitais; Gamification; Língua Inglesa.

## 1 Introduction

In the globalized Digital Era of the 21st century, humanity is inherently engaged in multimodal digital activities. From the youth to the elderly, smartphones are extensively employed for a diverse range of purposes, including scheduling appointments, conducting transactions, settling bills, working, studying, researching, attending conferences, watching films, reading, writing, socializing on social media platforms, and, of course, gaming. Digital technology has become an integral aspect of our lives, fundamentally transforming the manner in which we interact with the world around us.

Within the contemporary context, easy access to technologies, especially Mobile Digital Technologies (MDT), has resulted in an increasingly frequent interaction with machines that have communication capabilities, including robots, voice-activated applications, and games. Similar to a game, as in everyday life, we experience victories and defeats, progress, and stagnation. We are presented with the opportunity to correct mistakes and move forward on the right path or remain entangled within them. Furthermore, after overcoming obstacles, we experience a sense of empowerment, ready to face more complex challenges. This dynamic and interactive environment, in which playful elements are present, provides a new perspective on how we experience our daily activities.

Furthermore, in the contemporary landscape, we observe that society is increasingly immersed in the universe of Gamification. Tangible examples of Gamification can be seen in frequent flyer programs, point accumulation systems in supermarkets and telecommunications companies. These practices have generated significant changes in individual experiences, both in job selection processes, in achieving personal goals, as well as within the corporate context. Inevitably, the field of education has also been impacted by this trend.

Gamification, as an educational strategy, aims to employ game elements and mechanics to engage and motivate teachers and students in the process of teaching and learning. Through challenges, rewards, and playful interactions, it seeks to stimulate active student participation, thereby rendering the educational process more engaging and effective. Consequently, Gamification emerges as an innovative approach to transforming education, by expanding students' engagement potential and fostering more meaningful and enjoyable learning experiences.

Both students and educators are well-acquainted with digital resources due to their active involvement in social media and frequent use of mobile devices. Consequently, this calls for a transformation in the approach to teaching and assessing the English Language in Higher Education, striving to render it self-directed, interactive, multimodal, challenging, enjoyable, and motivating. Nevertheless, students still perceive assessment as a source of apprehension, characterized by superficial corrections and a lack of adequate feedback. Assessment is viewed as a tool to label the best-performing student, employing superficial corrections and lacking appropriate feedback. Faced with these challenges associated with traditional or summative assessment in Higher Education English Language teaching, the idea for our research emerged. As underscored by Santos (2005), it is crucial to reassess traditional assessment practices, specifically Summative Assessment, and explore more effective alternatives.

This article explores the utilization of Gamification as an innovative approach to English language assessment in the context of Higher Education, and how it can be applied to the design of innovative tasks related to formative assessment. The argument put forth is that the incorporation of certain Gamification elements can have a positive impact on the development of innovative assessment systems.

Thus, the first section will delve into Gamification; the second section will cover aspects ranging from traditional assessments to gamified evaluation, as well as English Language teaching and learning in Higher Education. In the third section, we will present our methodological aspects, followed by the results, final considerations, and references.

## 2 Gamification

In this section, we explore Gamification, which is among the widely employed active methodologies in both Basic and Higher Education, with a specific focus on its application within the context of teaching and learning, particularly in the domain of English Language instruction and evaluation. Furthermore, we underscore that a more detailed examination of Gamified Assessment will follow.

It is important to note that there is no consensus among researchers regarding the precise definition of Gamification or the distinctions between Gamification and Game-Based Learning (GBL). Kapp (2012) delves into the definition of Gamification within a pedagogical framework, drawing comparisons with GBL. According to Kapp, the instructional approach is adapted to incorporate game elements, wherein learning objectives are presented as challenges or missions in a gamified classroom. Prior to providing a definition of Gamification, Kapp (2012) first elucidates the concept of a game and posits that "a game is a system in which players engage in an abstract challenge, defined by rules, interactivity, and feedback, resulting in a quantifiable outcome, often eliciting an emotional response" (KAPP, 2012, p. 9).

In his work, Kapp (2012) delves into the concept of Gamification, including aspects beyond game mechanics in non-game contexts. The author defines Gamification as "the use of game mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems" (KAPP, 2012, p. 10). Further up in his work, Kapp (2012) delves into the concept of Gamification, including aspects beyond game mechanics in non-game contexts. The author defines Gamification as "the use of game mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems" (KAPP, 2012, p. 10). Furthermore, further up in the same work, the author provides another definition of Gamification, which appears to be more definitive and clearer, based on his postulations on the subject: "[...] a careful and considered application of game thinking to problem-solving and encouraging learning using all appropriate game elements" (KAPP, 2012, p. 11).

According to Deterding et al. (2011), Gamification involves the incorporation of game elements into non-game contexts. Aleksic-Maslac, Sinkovic, and Vranesic (2017) emphasize the importance of motivating students to actively participate in classes, whether in a traditional classroom setting or through online teaching methods. Hence, Gamification is defined as a strategy to teach new skills and increase participants' engagement in the proposed activities, making it a valuable resource in Education. To illustrate this comprehensive view of the concept of Gamification, we have created Fig. 1, based on the postulate of Deterding et al. (2011, p. 10).

Figure 1: *Gamification*



Source: Designed by the researcher

According to Alves (2015), Gamification is employed in various fields such as health, administration, business, and education. It also drives the development of educational technologies. To understand the concept of Gamification, one must understand what games are.

Games predate culture, as culture presupposes the existence of human society. Animals also engage in play, and if we observe a group of animals playing, we can see that they replicate behaviors and gestures that seem to constitute a certain ritual. They play and bite each other, with their strength seemingly controlled so as not to cause harm, and they evidently find enjoyment in these playful interactions. From this simple observation, we can conclude that play appears to be more than

just a biological manifestation. It serves as a significant function, and this becomes crucial when applied to Gamification (ALVES, 2015, p. 18, our translation<sup>1</sup>).

Gamification, both as an instructional and assessment approach, is closely related to multiliteracies. This approach incorporates the use of Information and Communication Technologies (ICT) and Mobile Digital Technologies (MDT) to carry out the proposed activities within the context of multiliteracies.

Thus, Gamification is an educational strategy that promotes learning through student engagement, while also encouraging the development of digital competencies, critical reflection, and engagement in online social and work practices. It is through this approach that we can explore the potential of digital technologies, integrating them meaningfully and effectively into the educational process. Gamification and Gamified Assessment bring aspects of real life into the virtual environment, recognizing the act of playing at different stages and ages. Playing is beneficial for human development, being a natural activity with rewards, providing experiences in situations and scenarios with immediate consequences.

Huizinga (1971) highlights the following characteristics of playing: 1. Play is free, not imposed by physical necessity or moral duty; 2. Play is not a reproduction of current life or real life, but a sphere of activity with its own orientation.; 3. Play has the capacity to fully absorb the player at any given moment.; 4. Play distinguishes itself from real life in terms of duration and space. It has a predetermined end, and this limitation of time makes it a cultural phenomenon because even after its conclusion, it continues to exist.; 5. Play establishes a specific and absolute order.

In the 1980s, the potential of games and Gamification began to be academically recognized. Thomas W. Malone highlighted the intrinsic motivation of games and their application in other fields, including education. According to Alves (2015), in 2003, the term Gamification gained popularity, and

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<sup>1</sup> O game é mais antigo que a cultura, uma vez que a cultura pressupõe a existência da sociedade humana. Os animais também brincam e, se observarmos um grupo de animaizinhos brincando, perceberemos que eles reproduzem atitudes e gestos que parecem um certo ritual. Brincam e se mordem e sua força parece controlada para não machucar o outro e, evidentemente, se divertem com essas brincadeiras. Desta simples observação concluímos que o jogo parece ser mais do que apenas uma manifestação biológica. Ele é uma função significativa e isso é muito importante quando o transportamos para o Gamification (ALVES, 2015, p. 18).

over time, further research on the subject emerged, solidifying its significance. In 2007, Bunchball launched a modern Gamification platform, which was the first to incorporate game mechanics, such as leaderboards, points, and badges, to serve the purpose of employee engagement (ALVES, 2015). The concept of Gamification, as defined by Kapp in 2012, underscores the importance of the deliberate use of game thinking to solve problems and stimulate learning.

In the proposed Gamified Assessment, the following dynamics were utilized: (i) Constraints: This dynamic defines the limitations of players within the Gamified Assessment process. We employed the challenges present in the applications themselves, which do not allow players to exceed the established proposals; (ii) Rewards: The players' progression and awareness of their levels of advancement were taken into account, utilizing the acquisition of badges and feedback as mechanisms to promote this sense of achievement; (iii) Gamified Assessment Mechanics: This mechanic refers to the game-like environment created in the Gamification process, employing the principles of game mechanics to engage players and involve essential processes.

In the design of our Gamified Assessment, students were encouraged to use the selected applications to complete the missions proposed in various assessment tasks. Furthermore, the greater challenges involved task resolution, allowing advancement through different assessment levels using several tools, ranging from simple quizzes to voice recordings. Components of the Gamified Assessment: To integrate the selected dynamics and mechanics into our Gamified Assessment, we employed the following components, as described by the authors: (i) levels of difficulty; (ii) familiarization with the applications through tutorials; and (iii) task resolution and achievement of badges for each goal accomplished.

To construct a Gamified Assessment, we opted for the use of educational technology through carefully selected and tested applications, enabling interaction with the participants. Strasser (2018) advocates that the use of educational technology, through applications, is relevant in foreign language teaching because: educational technologies are interactive and creative; many educational applications are collaborative; educational technology can be swift and expand knowledge; language-learning apps target the foreign language and support digital literacies; they provide authenticity by



offering materials and real-life language use situations, making learning more relevant and meaningful. Additionally, they are accessible and motivational, allowing students from diverse contexts and socioeconomic levels to access quality resources. Furthermore, these technologies are democratic, as they are available on mobile devices and can be used anywhere and at any time, facilitating access to foreign language learning.

We will continue our discussions from the perspective of assessment, teaching, and learning of a foreign language in Higher Education.

### **3 From Traditional Assessment to Gamified Innovation: Assessment, Teaching, and Learning of Foreign Languages in Higher Education.**

Throughout our journeys, we are constantly engaged in evaluation processes, wherein we reflect on our past actions, consider alternative approaches, analyze the outcomes achieved, and contemplate their implications. Moreover, we engage in ongoing assessments of our current actions, keeping our objectives and aspirations in mind, anticipating challenges, seeking solutions, and adjusting our trajectory to achieve more satisfactory results.

In the realm of evaluation, Dias Sobrinho (2002) highlights its complexity and polysemy, noting that the term encompasses distinct references. In general terms, evaluation is defined as the act of assessing, recognizing value, appraising, and appreciating something.

In the school context, assessment, often conducted through "written exams," aims to measure what the students have "learned" and assess whether there has been any change in their behavior after the test. It is important to understand that assessment is not neutral. The process of assessment and teaching-learning is imbued with political and ideological issues, serving a specific theoretical concept or project. In schools, assessment is conducted according to institutional objectives that reflect social values and norms, capable of contributing to both the maintenance and transformation of social reality. As highlighted by Caldeira (2000):

School assessment is a means, not an end in itself; it is delimited by a particular theory and pedagogical practice. It does not occur in a conceptual vacuum but is shaped by a theoretical model of society, of human beings, of education, and consequently, of teaching and learning, expressed in theory and pedagogical practice. (CALDEIRA, 2000, p. 122, our translation)<sup>2</sup>.

Assessment is an essential practice in the educational context, enabling teachers to systematically gather information about students' learning progress. Linn and Miller (2005) emphasize that assessment also influences the teaching practices adopted by teachers. Diverse forms of assessment are utilized, such as homework, projects, essays, written tests, student self-assessments, teacher observations, and performance of authentic tasks. It is important to mention that assessment occurs at different educational levels, including Higher Education.

Taras (2005) defines assessment as: "[...] the systematic collection and analysis of information to enhance student learning" (TARAS, 2005, p. 466). This definition captures the essence of what we believe to be the fundamental function of assessment in the teaching-learning process: to promote the improvement of student learning. Therefore, if we consider that the primary objective of assessment is to enhance student learning, it becomes equally important for educators to assess the effectiveness of their own teaching. Additionally, Fogaça (2014) emphasizes that assessment encompasses the entire educational system, at various levels, such as the classroom, its actors, and its learning outcomes; as well as the various modalities and types of tests; educational institutions; selection processes; and educational projects at local or global levels.

### *3.1 Types of assessment*

Based on our research, we can observe the close relationship between assessment and knowledge, as well as the positive or negative impact it might have on teaching and learning. As we

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<sup>2</sup> A avaliação escolar é um meio e não um fim em si mesma; está delimitada por uma determinada teoria e por uma determinada prática pedagógica. Ela não ocorre num vazio conceitual, mas está dimensionada por um modelo teórico de sociedade, de homem, de educação e, conseqüentemente, de ensino e de aprendizagem, expresso na teoria e na prática pedagógica CALDEIRA, 2000, p. 122).

explore the history of assessment, from its origins to the present day, we discern its various forms over time. Consequently, we have chosen to develop a Gamified Formative Assessment approach, aiming to assess for learning and evoke a sense of accomplishment in students resulting from effective learning. There are various types of assessment, each with its own characteristics and designations. According to Santos (2005), the three most well-known types of assessment are diagnostic assessment, summative assessment, and formative assessment. Let us briefly discuss each one.

(i) Diagnostic Assessment: This type identifies students' prior knowledge, determining which content needs to be reviewed before introducing new material. It also seeks to identify learning difficulties and verify prerequisites necessary for the proposed learning experiences. It is administered at the beginning of the learning process to assess students' learning and plan actions based on their needs.

(ii) Summative Assessment: "[...] with the purpose of assigning a grade or a concept for promotion and has a classificatory function [...]. Its objective is to judge and classify the student based on their achievement at the end of a unit or semester. It assigns grades and concepts with the goal of classifying the student at the end of a period or course, for promotion purposes. Conducted during the semester, the student is promoted based on their performance in the studied curricular components.

(iii) Formative Assessment: "It has the fundamental purpose of verifying if the student is gradually mastering the planned objectives, expressed in terms of knowledge, skills, and attitudes [...], allowing adjustments throughout the course [...], and serves the quality control of school work" (SANTOS, 2005, p. 23). It checks if the student is progressing gradually in the objectives of knowledge, skills, and attitudes established. It allows adjustments throughout the course and focuses on small segments of the material studied. It includes continuous feedback and active involvement of the student in their own learning process. We have chosen to employ Gamified Formative Assessment in English Language teaching in the 21st century due to its benefits. This approach fosters students' engagement through challenges, rewards, and friendly competitions, encouraging their active participation in assessment activities. Furthermore, it provides immediate feedback to students, assisting them in

monitoring their progress and identifying strengths and areas for improvement. This facilitates self-regulated learning, enabling them to adjust their study strategies and enhance their performance.

Moreover, Gamification and, consequently, Gamified Formative Assessment also promote active learning, encouraging students to engage in knowledge construction through playful challenges and problem-solving. This results in more meaningful and lasting learning, as students have the opportunity to apply what they have learned in practical and authentic situations.

There is no doubt that young people today appropriate and utilize these technologies both inside and outside the school and academic environment. What we consider is the opportunity to use them as facilitating tools in the foreign language learning process, especially in the context of Higher Education, based on the Pedagogy of Multiliteracies. According to Dudeney, Hockly, and Pegrum (2016): [

Just like all past communication technologies, our new digital tools will be associated with changes in language, literacy, education, and society. In fact, they already are. Some observers perceive losses, such as the decline of more linear approaches to reading or more reflective approaches to writing. But others perceive gains, such as education through personal learning networks or collaborative projects based on collective intelligence. (DUDENEY; HOCKLY; PEGRUM, 2016, p. 17).

Interaction and interactivity have become prominent features in the contemporary context, especially among teenagers and young adults in Higher Education. English language teachers at different educational levels and instructors working with L2 in Higher Education recognize the need to use digital tools to facilitate reading, textual production, listening comprehension, and the acquisition of oral language in a foreign language. We value the integration of reading and textual production skills through these technologies, aiming to enrich the foreign language acquisition process. With an approach based on Multiliteracies, we explore the potential of digital technologies as dynamic and contextualized resources that help students develop their language and communication competencies more effectively and engagingly.

Therefore, by integrating technology into foreign language teaching in Higher Education, based on the principles of Multiliteracy Pedagogy, we aim to provide students with a more meaningful learning

experience aligned with contemporary practices of digital communication and interaction. Personalization of learning is another crucial aspect of Gamified Formative Assessment. It enables tailoring activities to individual students' needs, identifying learning gaps, and offering targeted interventions to support their progress at their own pace.

Ultimately, Gamified Formative Assessment contributes to the development of 21st-century skills such as collaboration, creativity, critical thinking, and problem-solving. After all, gamified activities utilize game mechanics and simulate real-world situations, requiring students to use their language skills authentically and communicatively. In summary, Gamified Formative Assessment in English Language teaching in the 21st century engages students, provides immediate feedback, fosters active learning, personalizes instruction, and nurtures essential skills. This innovative approach enhances students' learning experience, making it more engaging, motivating, and aligned with the demands of the present world.

The teaching and learning of a foreign language require the development of specific skills to acquire fluency and communicative competence. Students are expected to master the four essential skills: reading, writing, listening, and speaking. Additionally, grammar and vocabulary should be taught and applied in an integrated manner alongside the mentioned skills.

Grammar is crucial in teaching English as a foreign language, but its complexity makes learning challenging. Students face difficulties in grammar, vocabulary, and speaking skills, but they recognize the importance of formal grammar study. In this research, we emphasize working with grammar through linguistic analysis, critically reflecting on grammar and vocabulary structures embedded in everyday uses of English as a second language. Grammar teaching has evolved to focus on communicative skills, using contextualized and playful approaches, making students more comfortable and increasing their sense of progress in language learning.

Recognizing that today's students are digital natives, growing up with technological advancements and having diverse methods for their learning process, as well as higher expectations for teaching and learning, Gamification and gamified assessment come into play in this context.

We will now move on to our methodological aspects.

## 4 Methodology

The research is of a quantitative-qualitative and descriptive nature, adopting the case study as the method of investigation. The case study allows for an in-depth analysis of a specific context, providing detailed information about the use of Gamification in the assessment of English Language in Higher Education. Quantitative data were collected through questionnaires and students' performance records, while qualitative data were gathered through participant observations and interviews

### 4.1 Action Strategies

The present research is based on the use of Gamification as an assessment tool in Language Instruction (LI) at the Higher Education level. The study contributes knowledge about Gamification and clarifies the distinction between it and Game-Based Learning, as well as its effects, such as the use of mobile technologies to aid in producing "[...] personally customized, socially constructed, and extending beyond the classroom" (HOLDEN; SYKES, 2011, p. 4). Specifically concerning LI, it is a learning context where the use of Gamification is not yet prevalent.

Finally, the justification for the relevance of using Gamification in the assessment process of English Language aligns with the work on Mobile Digital Technologies (MDT) in schools, in favor of a new educational paradigm in teaching and learning (CAIADO; LEFA, 2017).

The action strategies employed by us consisted of the following steps: (i) observation of English Language classes in the sixth semester; (ii) conducting semi-structured interviews with students and English Language teachers; (iii) designing the Gamified Assessment; (iv) implementing the Gamified

Assessment using MDT; (v) conducting a follow-up semi-structured interview with the students after the conclusion of the Gamified Assessment.

For the purposes of this article and based on the data collected in our case study, we examined the interviews with the teachers and students (research participants), along with the analysis of the applied Gamified Assessment and its impact on the teaching and learning of English Language in Higher Education. We discussed the participants' perceptions on the subject under study, and after presenting and contextualizing the corpus, we analyzed the obtained results. In this sense, it is crucial to revisit our research objectives to proceed with the corpus analysis.

Two participants in the research are students of the mentioned Higher Education institution, both in their 6th semester of the Language Studies course. Subject 1 (S1), aged 26, is fluent in English in all language skills and works as a language teacher in an language institute. He expresses a critical view regarding the teaching and assessment of English Language in Higher Education, stating the need to reinvent many aspects of the discipline. Subject 2 (S2), aged 22, is also fluent in English and has experience as an English language teacher in private institutions.

During the research, the selected English language teacher for the study, who is also a professor at the university where the research was conducted, withdrew from the interview stage. This possibility of withdrawal was anticipated in the research project's risk assessment and was communicated to the Ethics Committee of the university. The random selection of the ten (10) teachers who responded to the online survey was carried out through the BRELT<sup>3</sup> community on Facebook. Regarding the teachers' profile, the information is limited to their years of experience in teaching English and in Higher Education. The interview was conducted online using the "Online Pesquisa" research platform, which is also accessible on Mobile Digital Technologies (MDT).

## 5 Analysis of the Results

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<sup>3</sup> Brazilian English Language Teachers

The creation of our Gamified Assessment model, which can be seen in Table 2, was based on the contributions of Alice Keeler (2014), an expert in EdTech (Education Technology) and collaborative learning. The author developed a model using Google Sheets, which allows the creation of a list of activities in which the participants were involved.

By providing a wide variety of tasks at different levels of difficulty, participants had the freedom to choose activities that challenged them, without the need to follow a specific order. Regarding the badges, we used a badge guide that contains several images of patterns available on the internet, as illustrated in Table 1.

Additionally, we reaffirm that our research was submitted and approved without restrictions by the Research Ethics Committee of the Catholic University of Pernambuco, as it involved Human Subjects. The study was conducted under the approval of the Ethical Opinion number: 3.423939.

Table 1: Gamified Assessment

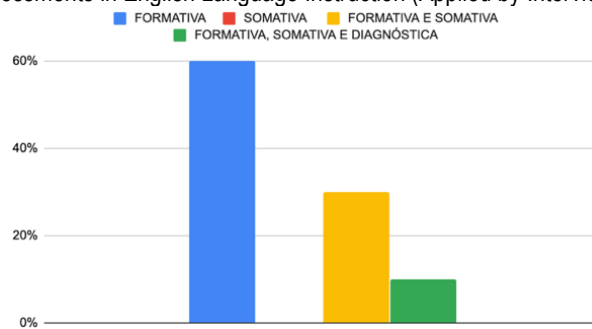
Instructions:							
1. Read each of the instructions before you start.							
2. Look at each item on the table below.							
3. Each item has a level of difficulty according to the number of stars.							
4. Do only ONE task at a time.							
5. You can redo any of the tasks.							
6. For each accomplished task, drag a badge from column 8 to column 7. (The badges correspond to the tasks level of difficulty)							
1	2	3	4	5	6	7	8
Level of difficulty	★	Scoring points	Item number	Instruction	Link	Your Badge	Badges MODEL
1	★	5	1	Watch a short video called "a single life"	<a href="https://vimeo.com/225249697">https://vimeo.com/225249697</a>	Level 1	
1	★	7	2	Answer a quiz about the video <b>Register before answering</b> . Play the interactive mode	<a href="https://en.jiscollective.com/video-lessons/single-life-past-simple-vs-past-continuous-practice">https://en.jiscollective.com/video-lessons/single-life-past-simple-vs-past-continuous-practice</a>	Level 1	
2	★★	8	3	Watch a short video of a poem called "Look Up" by Gary Turk	<a href="https://youtu.be/Z7dLU6fk9QY">https://youtu.be/Z7dLU6fk9QY</a>	Level 2	
2	★★	10	4	Answer the questions about the poem. Use one of the two options: <b>Flashcards</b> or <b>Matching</b>	<a href="https://www.studycast.com/flashcard-3139560">https://www.studycast.com/flashcard-3139560</a>	Level 2	
3	★★★	15	5	Read a short story by Virginia Woolf	<a href="https://eboks.adeia.de.edu.br/wxscdfvrginia/v91h/chapter1.html">https://eboks.adeia.de.edu.br/wxscdfvrginia/v91h/chapter1.html</a>	Level 3	
3	★★★	15	6	Answer the quiz playing on the <b>learning</b> model	<a href="https://quizlet.com/_6jlo2?x=1jgt&amp;i=4u5qx">https://quizlet.com/_6jlo2?x=1jgt&amp;i=4u5qx</a>	Level 3	
5	★★★ ★★	15	9	How to make a comment on Voice Thread	<a href="https://youtu.be/u-zWwqZJrE">https://youtu.be/u-zWwqZJrE</a>	Level 5	
5	★★★ ★★	25	10	Make your comment on Voice Thread. Record your voice. Comment on Pablo Neruda Poem recited by Madonna and leave a comment on your friend's	<a href="https://voicethread.com/myvoice/thread/13317392/80651717/74880788">https://voicethread.com/myvoice/thread/13317392/80651717/74880788</a>	Level 5	
Total =						100	



Source: Designed by the researcher

Regarding the online research conducted with English teachers, we have selected the most relevant information for the purposes of this article. From the collected data, it was observed that the participating subjects possess diverse perspectives regarding the concept of assessment in English Language Instruction. The results showed that the majority of teachers, 60%, are acquainted with and embrace formative assessment, a term that seems to be present not only in their beliefs but also in their actual teaching practices.

Graph 1: Assessments in English Language Instruction (Applied by Interviewed Teachers)



Source: Designed by the researcher

The data shows that the term "Formative Assessment" is viewed very positively by the research participants. As Perrenoud states, "Any assessment that helps the student to learn and develop, participating in the regulation of learning and development towards an educational project, is formative." (PERRENOUD, 2000, p. 78).

It is interesting to note that 30% of the teachers use two types of assessments: formative and summative, confirming that, despite slow changes in our assessment system, summative assessment, traditional or cumulative, the latter term used by Luckesi (2011), is still significantly used in Brazil. According to the author, summative assessment involves the combination of various assessment instruments, and the student receives a single grade based on the summation of these results at the end of a specific period.

The difference in perception among language teachers regarding assessment is evident. Our experience attests that not too long ago, there was a greater emphasis on developing summative assessments, where the main focus was on grammar and vocabulary-related questions. From the data collected in the interviews with the teachers, we can infer that the use of

ICT and technological advancements have brought about changes in how English, as a second language, is assessed. "We are still in the early stages of understanding and changing these concepts," as affirmed by Luckesi (2011, p. 211)<sup>4</sup>.

Mobile Digital Technologies (MDT), collaborative platforms, and Gamification are present in the teaching and learning of a Foreign Language (LI), promoting active student participation and the autonomy expected from 21st-century learners who are capable of recognizing their own progress and understanding how much further they need to advance to reach yet unachieved objectives. Assessment extends beyond written and oral exams, encompassing grammar, vocabulary, reading, text interpretation, and listening comprehension. For this article, we will analyze the students' responses in the semi-structured interview, as presented in Table 3. For the purpose of this article, we have selected and will discuss the students' responses in the semi-structured interview. In Table 3 below, the participants' answers are visible.

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<sup>4</sup> "Ainda estamos engatinhando na compreensão e na mudança desses conceitos", atesta Luckesi (2011, p. 211)

Table 3: Participants' answers.

Second Interview Questions	Responses from S1 Student of Letras and experienced English teacher	Responses from S2 Student of Letras and less experienced English teacher
1. Efficiency of Gamified Assessment	Yes: Enriching. It deviates from the traditional. Gives students autonomy and freedom.	I found it efficient because it deviates from paper-based assessments and engages students with challenges.
2. Motivation	Yes, students like technology, and multimodal activities are the future.	Yes, because I was challenged, and any game that challenges me motivates me to complete it.
3. Chance of performing better in Gamified Assessment	Yes, because it didn't feel like an assessment. It's interactive, free from specific rules, and challenging.	Yes, because the challenge was constant as the tasks were different, making them unpredictable.
4. If Gamified Assessment were implemented in HE, would it bring good results and give students a sense of progress?	I felt engaged with multimodal content; they learn and absorb much more fluidly. I felt like I was truly learning throughout the activities	Yes, because students in HE are not much different from students in middle school or elementary school. HE students are simply continuing their studies in a more specific area of knowledge. Curiosity and the need for challenges don't fade away, and the excessively verbalistic language and methodology in academia are extremely tiring and demotivating.
5. What did you like most about Gamified Assessment?	Video - it captured my attention.	Being able to go back and see where I went wrong helps in the learning process. Mistakes teach a lot. Being able to review the feedback.
6. What did you like least about Gamified Assessment?	There's nothing I didn't like.	The last one. Confusing instructions, I had a bit of a hard time because I didn't understand and couldn't figure out what to do on my own... But I think I didn't pay much attention to the instructions, and when it was explained, I did it without difficulty.
7. Positive and negative effects on teaching	Practicality, speed, and autonomy. I don't think there's anything negative...	Positive: they provide the greatest chances for student engagement. Negative: I think it takes some effort to set up an assessment like this
8. Positive and negative effects on learning.	I felt more open, not pressured, and it made me exercise my knowledge in a very interesting way. I didn't see any negative points. One limitation is if the connection drops.	All very positive: the dynamism in the activities, the challenge of each activity, the practicality, and the immersion in the foreign language. I didn't see anything negative.

Source: Designed by the researcher

From the responses to the first three questions of both subjects, we have already recognized the positive effects of Gamified Assessment on teaching and learning in the HE (Higher Education) context. Both subjects consider Gamified Assessment to be effective. In their responses, we were struck by the fact that Gamified Assessment is considered efficient because it

promotes autonomy and challenges, while diverging from traditional assessment methods. We can infer from the participants' statements that Traditional Assessment is neither challenging nor promotes autonomy. Furthermore, based on these postulations, we can assert that the subjects in our research are evaluated according to the traditional assessment approach.

When considering the implementation of Gamified Assessment in Higher Education (HE), S2's opinion stands out, emphasizing the significance of this approach. According to him, HE students are not different from those in Secondary or Elementary Education, as curiosity and the need for challenges persist, and the excessively verbal language and traditional methodology of the Academy become tiresome and demotivating.

Autonomy was a word that appeared more than once in the students' responses. "Autonomous learners are primarily able to: self-determine the general direction of their learning; actively engage in managing their own learning process; exercise freedom of choice in relation to learning resources and activities" (Nunan, 2003, p. 7, our translation). The association of autonomy with freedom was mentioned by one student, emphasizing that Gamified Assessment allows students to become active participants in the learning process, receiving immediate feedback and having the opportunity to redo and correct their own mistakes, which is permitted in Gamified Assessment.

The diversity of tools and missions, as well as the provision of digital materials and pedagogical support, were strategies adopted in Gamified Assessment to arouse curiosity, encourage progress, and promote awareness of the learning process. The gamified approach was praised by the participants as it broke away from predictability and provided challenging and unpredictable activities. Furthermore, linguistic interactions were considered fundamental as language is seen as an interactive act that occurs through enunciation and dialogue. In this sense, interactions play a critical role in language teaching and learning, enabling students to acquire meanings and linguistic functions in different contexts. We sought to provide the participants of Gamified Assessment with a variety of digital materials and pedagogical support to guide them through the instructions prior to each mission (tutorials) and the activities within those missions found in each of the chosen applications.

The idea was to break away from predictability and arouse the curiosity and desire of the students to progress further, encouraging them to become more aware of what they were accomplishing when learning to use each of the applications, rather than simply performing mechanical and predictable activities as typically occurs in Traditional Assessment, as evidenced by the participants' statements: S1: "[...] it didn't feel like an assessment. It's interactive, free from specific rules, challenged" and S2: "[...] the tasks were different, which made them unpredictable."

Regarding interactions, it is crucial to remember that, as an interactive act, language necessarily implies enunciation, which for Bakhtin is the same as an utterance. For Bakhtin, (2006) it is the place of speech, defined as verbal interaction. From the dialogical perspective of language and learning (Bakhtin, 2006), language is organized dialogically at the level of utterance, which is both modeled and renewed. Based on this view, interactions play a critical role in language teaching and learning, as it is through engagement in practices that students acquire the meanings and functions of language in different ways and different contexts.

Another aspect worth mentioning is motivation. The word motivation appears both explicitly and implicitly in the participants' statements when asked if they felt motivated to complete the tasks (missions) of the proposed Gamified Assessment. S2 states, "Yes, because I was challenged, and any game that challenges me motivates me to complete it." It can be observed, therefore, that this participant is intrinsically motivated by the challenge in the game.

On the other hand, S1 links motivation to the use of technology: "[...] students like technology, and multimodal activities are the gateway to the future. In the 21st century, the modern world of the digital era, language teaching and learning are also part of a web of interconnected needs and knowledge. In this sense, the use of TDM was fundamental, as they bring countless multisemioses and possibilities to interact with the real and virtual world. TDMs are also part of the daily life of people of various ages and are attractive due to the ease of use they provide to their users. When asked about whether implementing Gamified Assessment in ES would yield good results and give students a greater sense of progress, S2 states, "The student feels engaged with means that are so present in everyday life outside the classroom, which are, indeed, apps, websites, audios, music, videos where they are exposed to multimodal content, and they learn and absorb it in a much smoother way. I felt throughout the activities as if I were really learning."

The participants' opinion on Gamified Assessment is highly significant. S1 highlighted the use of videos as a positive aspect, emphasizing that in the era of digital media technologies and smartphones, visuals play a significant role in everyday life, capturing the audience's attention. The use of videos in language technologies offers a complete multisemiotic experience, combining visual and auditory elements and providing exposure to authentic language. Both participants considered Gamified Assessment highly positive, although they mentioned possible issues such as internet connection interruptions during the assessment process. One of the participants mentioned finding the instructions confusing in one of the missions on Voice Thread but admitted that the lack of understanding was due to not paying attention while reading the instructions, and they were able to overcome the difficulty after receiving an explanation.

With this understanding, we will now move on to our final remarks.

## Final Remarks

The present research aimed to examine the impacts of Gamification on Assessment in the context of foreign language teaching and learning in Higher Education. To achieve this purpose, we conducted an investigation that encompassed a historical analysis of assessment and games, culminating in the development of the structure and construction of Gamified Assessment for foreign language instruction in Higher Education.

We addressed ICT, Multiliteracies, and Multisemiotics, which were instrumental in the analysis and construction of the corpus. The transition from traditional assessment to a multiliterate and multimodal approach goes beyond identifying specific skills or creating rubrics. The pedagogy of multiliteracies represents a philosophically distinct perspective from the predominant cognitive approach, demanding a new conception of texts and assessment. Cope and Kalantzis (2000) describe this shift as a "new basics," emphasizing the need for learning that fosters active engagement with diverse people and textual genres, avoiding alienation and exclusion. According to the authors, assessment techniques must undergo a radical transformation to drive new forms of learning and more accurately measure the skills required in the 21st century. The positive results of the research are corroborated by the testimonials of the teachers and participants of the Gamified

Assessment. The analysis reveals that the majority of teachers adopt a traditional approach to teaching and have little familiarity with innovative assessments, including Gamified Assessment. The lack of clear understanding of the concept and functioning of Gamification by teachers is attributed to a lack of training, generational differences, and resistance to changes in the way of teaching and evaluating, both by teachers and educational institutions. However, they recognize the importance of assessment models aligned with the technological demands of the 21st century.

The analysis of interviews with students participants in the Gamified Assessment revealed the positive effects of using gamification in English language teaching in Higher Education. In addition to the assessment results, the participants' responses highlighted the engagement motivated by the proposed challenges. Gamification transformed the content of the Letras course into missions with challenges for the students, resulting in significant gains in the students' learning process. Their perceptions of this assessment method were highly positive.

Regarding teaching, we found that the missions are highly enriching, even when addressing traditional content, as it is possible to motivate both teachers and students by planning activities that make use of multimodality and various discursive genres. The success of the Gamified Assessment is directly related to the planning and use of a diverse range of discursive genres. Equally important were the testimonies of the student participants in the research, English language students in the Letras course, who reacted positively to the gamified assessment process and considered this assessment model beneficial for both teaching and learning.

Through the Gamified Assessment, the research participants demonstrated, through the completion of missions, that being evaluated in this way provoked varied feelings in them, ranging from motivation and autonomy to a sense of progress achieved. Based on the data collected, we consider that both our general objective - To analyze the effects of Gamification in assessment for teaching and learning English in Higher Education, as well as our specific objectives, namely, to describe and explain the effects of Gamified Assessment for teaching and learning English language, have been achieved

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