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Assessing the Compatibility of Non-Language Learning Games for Language Education: Development of the FUN (Functionality-Usability-Normality) Framework

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ABSTRACT

The increasing integration of digital games into informal language learning has highlighted the potential of commercial, non-language-learning games as supplementary pedagogical tools. However, educators lack a systematic framework to evaluate their compatibility with language learning objectives, particularly in genre-based instruction. This study addresses this gap by developing a practical evaluative framework for selecting suitable games. A qualitative design was employed using a Focus Group Discussion (FGD) involving eight experts in game-based learning, game design, and applied linguistics. Data were collected through a structured online discussion and analyzed using Spradley's developmental research sequence, including domain, taxonomy, componential, and cultural theme analysis, guided by theories of game functionality, genre-based pedagogy, ergodic texts, and gamification. The analysis resulted in the development of the FUN framework, consisting of three dimensions: Functionality, Usability, and Normality. Functionality examines the alignment between game genres and targeted text genres through interpretive, explorative, and configurative user functions. Usability addresses platform accessibility and learner familiarity, influencing implementation feasibility. Normality evaluates socio-cultural appropriateness and potential distractions. These dimensions are operationalized into a compatibility rubric with three levels: compatible, appropriate, and discordant. The FUN framework provides a structured and practical tool for educators to evaluate and integrate commercial games into language learning contexts. While conceptually robust, the framework requires further empirical validation in classroom settings. Future research should examine its effectiveness in improving instructional decision-making and learning outcomes.

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1. INTRODUCTION

The integration of digital technology into language education has significantly expanded opportunities for learners to engage with English beyond formal classroom settings, particularly in informal and online contexts (Cole et al., 2024; Li et al., 2024). Among these technologies, video games have attracted growing attention due to their capacity to reduce learner boredom and to foster situated meaning and practice, allowing players to solve problems and process language within immersive environments (Chen et al., 2023). As Thomas (2012) suggests, digital games in language learning can function either as a primary instructional resource or as supplementary "gap fillers." This distinction is pedagogically important, as the role assigned to games shapes how they are selected and implemented. When used as core instructional tools, games are typically designed explicitly for language learning and closely aligned with curricular objectives. In contrast, when used as supplementary resources, games are often non–language-learning or commercial games that nonetheless possess potential linguistic affordances. It is within this supplementary context that issues of pedagogical compatibility become particularly salient, as the educational value of such games depends largely on how effectively they can be aligned with language learning goals.

In the English as a Foreign Language (EFL) context, this distinction is especially pronounced. A clear divide exists between educational games developed for language instruction and commercial "off-the-shelf" games (Sundqvist, 2024). While the former are inherently designed to support curricular aims, the latter offer rich, yet largely untapped, pedagogical potential without providing clear guidance for classroom integration. The central challenge, therefore, lies in determining the compatibility of non-educational games with specific language learning objectives, such as text-genre mastery. For example, an augmented reality game like Pokémon Go may expose learners to descriptive text genres; however, its instructional use can be constrained by technical distractions, platform accessibility issues, or socio-cultural norms that conflict with classroom expectations.

Previous studies have examined how game genres influence language acquisition (Calafato & Clausen, 2024; Hanghoj et al., 2022) and how gaming experiences are shaped by interaction and design (Rapp, 2022). Extending this line of inquiry, Rye et al. (2025) suggest that compatibility in game-based learning is shaped by the alignment of underlying beliefs, instructional practices, and learning goals. Even games that are functionally suitable for language learning may fail to realize their pedagogical potential if these elements are misaligned. From a broader educational perspective, Quadir et al. (2022) argue that the ultimate aim of compatibility in learning is naturalness, requiring coherence between the domains being bridged, in this case, language and gameplay. In language learning contexts, this coherence is further captured by the notion of affordance compatibility (Gordon et al., 2019), which emphasizes the learner's dual role as both gamer and language learner. For learning affordances to emerge, learners must perceive that what a game offers aligns meaningfully with their linguistic goals. Without such alignment, the pedagogical potential of digital games remains largely unrealized Tyutelova et al., 2023).

Furthermore, scholars have identified that game compatibility depends on the alignment of beliefs, practices, and goals (Hamari & Nousiainen, 2015). However, there remains a critical gap in research: the lack of a practical, systematic guideline for teachers to evaluate whether a non-language-specific game is functionally and logistically compatible with their classroom needs. While theoretical parallels exist between game functions (e.g., deductive mechanics in RPGs) and linguistic genres (e.g., narrative structures), educators currently lack a structured rubric to bridge these two domains. Addressing this gap, this study attempts to construct a guideline to analyze the compatibility of non-language-learning games for the EFL classroom. By synthesizing theories of game functionality (Vargas-Iglesias, 2018), genre-based pedagogy (Derewianka, 2003), and ergodic text functions (Aarseth, 1997), this paper seeks to answer the following research question: *What considerations must be taken into account when constructing a guideline to indicate the compatibility of non-language-learning games for language learning?*

This research provides a framework, the FUN (Functionality, Usability, and Normality) rubric, derived from a Focus Group Discussion (FGD) with game designers and GBL experts. The study offers a

significant contribution by providing practitioners with a reliable instrument to ensure that the use of commercial games like "gap fillers" or supplementary materials is pedagogically sound and free from prohibitive distractions.

2. METHODS

The data for this qualitative study were derived from a Focus Group Discussion (FGD) involving key stakeholders with expertise in game design and game-based language learning. The participants consisted of eight individuals: Three experts in gamification and game-based learning (GE), two professional game developers with experience in commercial digital game design (GD) and three researchers specializing in applied linguistics and educational technology (RS). Participants were selected using purposive sampling to ensure that all contributors possessed relevant theoretical knowledge and practical experience related to digital games and their potential application in language learning contexts (Hwang & Chang, 2025).

The FGD was conducted to explore participants' perspectives on the use of non–language-learning games for language learning purposes, with particular attention to issues of pedagogical compatibility and the educational potential of specific game elements. The discussion lasted approximately 120 minutes and was conducted online via a video-conferencing platform to accommodate participants from different professional and geographical backgrounds. With participants' informed consent, the session was audio- and video-recorded to ensure accurate data capture. The recordings were subsequently transcribed verbatim by the researcher, and the transcripts were checked for accuracy prior to analysis.

Ethical clearance for the study was obtained from the institutional research ethics committee. All participants were informed of the study's aims, procedures, and their rights, including voluntary participation, confidentiality, and the option to withdraw at any stage without penalty. Initial of participants were used in the transcripts and reporting to protect participants' identities. To enhance the credibility and trustworthiness of the findings, sample excerpts from the FGD are presented in the analysis. For example, one gamification expert noted:

> *"Many commercial games already have strong narrative and problem-solving elements. The challenge is not the game itself, but how teachers align those elements with language objectives."* (GE2, FGD)

Similarly, a game developer emphasized the importance of intentional design alignment:

> *"From a developer's point of view, these games were never meant for classrooms. But if educators understand the mechanics and goals, they can repurpose them meaningfully."* (GD1, FGD)

A researcher in language education further highlighted pedagogical concerns:

> *"Without clear learning goals, games risk becoming entertainment only. Compatibility depends on how well the gameplay supports linguistic outcomes."* (RS1, FGD)

These excerpts illustrate convergent and divergent viewpoints among participants and support the analytical claims derived from the FGD data. The transcripts were analysed thematically to identify recurring patterns related to beliefs, practices, goals, and compatibility in the use of non-educational games for language learning.

The games taken into the FGD were selected based on the theory of Vargas-Iglesias (2020) and the level of fame which was seen from their popularity. The genre taken from Vargas-Iglesias' theory was the genre that represented the functional relation. Another criterion taken was that the games should have spanned across platforms, implying that a single game can be played across different platforms through multiple launches or porting (Chan & Lo, 2024). The emphasis of the cross-platforms is on mobile to or from non-mobile platforms. The following are the titles of the games:

Table 1. Selected Games

Genre typology	Genres	Functional Relation	Titles	Developers/Publishers
Elemental	Fighting	Action	Street Fighter IV Champion Edition	Capcom
	Visual novel	Puzzle	Ace Attorney series	Capcom
	Card battle	Strategy	Gwent: the Witcher Card Game	CD Projekt Red
	Turn-based RPG	Role Play	Final Fantasy IX	Square Enix
Hybrid	Action-adventure	Action (Puzzle)	Metal Slug series	SNK Corporation
	Real-time tactics	Strategy (Action)	Final Fantasy Tactics: The War of the Lions	Square Enix
	Tower defense	Action (Strategy)	Plants vs Zombies	Popcap Games/EA
	Sports	Action (Role Play)	FIFA series	EA
Mixed	Free roaming	Puzzle/Strategy (Role Play)	Elder Scrolls V: Skyrim	Bethesda Softworks
	Survival horror	Puzzle/Strategy (Action)	Five Nights at Freddy's	Scott Cawthon/Steel Wool Studios/Scott Games/Lionsgate Games
	Moba	Action/Role Play (Strategy)	Player's Unknown Battleground (PUBG)	PUBG Corporation/KRAFTON/ Microsoft Corporation/

The games were discussed in the FGD to reveal the opinions from the designers and the experts when they had to be used in an English learning context. The opinions and the phenomenon shown by the games were then analyzed with functionality-based game functions by Vargas-Iglesias (2018), genre-based approaches in the English classroom by Derewianka (2003), user's functions by Aarseth (1997), and the gamification process on language learning by Casañ Pitarch (2018) as the guideline theories in a four-phase analysis by Spradley (2016).

The four phases of analysis were domain, taxonomy, componential, and finding cultural theme analyses. First, in domain analysis, opinions were classified based on the functional relations based on the theory of Vargas-Iglesias. Second, in taxonomy analysis, the opinions which were already classified based on functional relations were made into a taxonomic categorization based on the theory of Derewianka (2003) to reveal the focus of text, purpose, meaning, and purpose in a genre-based context. These focuses were seen from the perspectives of user's functions by applying ergodic theory from Aarseth (1997). Third, in componential analysis, the classification and categorization done in the first and second phases were connected by employing the theory by Casañ Pitarch (2018) to find out the outer and inner layers of compatibility. The last phase, finding cultural themes, would indicate how game genres and textual genres in the English language learning context might be used as a compatibility guideline.

3. FINDINGS AND DISCUSSION

3.1 Findings

The findings indicate that the compatibility of non–language-learning games for language learning purposes can be systematically evaluated through three interrelated considerations: functionality, usability, and normality (FUN). These considerations emerged consistently from the FGD and were subsequently operationalized into a compatibility rubric. Together, they explain how, why, and under

what conditions commercial digital games can meaningfully support language learning rather than function merely as entertainment.

3.1.1 Functionality

Functionality refers to the extent to which the predominant game genre and its embedded textual elements align with the intended language-learning text genres. The findings show that most commercial games embed multiple text genres implicitly, requiring learners to interpret, explore, or configure textual meanings through gameplay. FGD participants emphasized that games rarely present text genres explicitly in conventional paragraph forms. Instead, genres are embedded as part of gameplay mechanics:

> *"In most commercial games, text genres are not taught directly. They are experienced. Players infer narratives, procedures, or descriptions through actions and dialogue rather than reading structured texts."* (RS2, FGD)

Game developers further highlighted that narrative, and procedural texts are integral to game progression: *"Tutorials, quests, and dialogues are not add-ons; they are how players learn to survive in the game world."* (GD2, FGD)

The following table might help comprehend what functionality is all about:

Table 2. Functionality of Game and Text Genres based on User's Functions

Functional Relation	Titles	Text Genre Predominance						
		Nar/ Rec	Desc	Pro	Exp	Expl	Dis	Rep
Action	Street Fighter IV Champion Edition	Explo	Explo	Explo	Inter	Inter	Inter	Inter
Puzzle	Ace Attorney series	Explo/Config	Explo	Explo/ Config	Inter	Inter	Inter	Explo
Strategy	Gwent: the Witcher Card Game	Inter	Explo	Explo/ Config	Inter	Inter	Inter	Inter
Role Play	The Witcher III: Wild Hunt	Explo/Config	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter
Action (Puzzle)	Metal Slug series	Explo/Config	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter
Strategy (Action)	Final Fantasy Tactics: the War of the Lions	Explo/Config	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter
Action (Strategy)	Plants vs Zombies	Inter	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter
Action (Role Play)	FIFA series	Explo/Inter	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter
Puzzle/Strategy (Role Play)	Elder Scrolls V: Skyrim	Explo/Config	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter
Puzzle/Strategy (Action)	Five Nights at Freddy's	Explo/Config	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter
Action/Role Play (Strategy)	PUBG	Inter	Explo/ Config	Explo/ Config	Inter	Inter	Inter	Inter

Nar/Rec: Narrative/Recount Desc: Description Pro: Procedure Exp: Exposition
Expl: Explanation Dis: Discussion Rep: Report
Inter: Interpretive user's function Explo: Explorative Config: Configurative

User's functions, as laid by Aarseth (1997), deal with how the elements of games dictate and compel the gamers to perform particular actions. Text genres are also a part of games which are treated as a part of the game mechanics. Leaning over this ergodic perspective, they might be delivered interpretively, indicating that the text genres are not explicitly delivered or delivered in a conceptual abstract mode. In any RPGs like Square Enix's *Final Fantasy* series, where story is the driving force, for example, discussions that deal with opposing opinions on certain issues might be delivered within the narrative through the characters. Characters might intermingle over particular issues with different opinions and actions. Since the generic structure is delivered through dialogues or narrations not in paragraphs, this discussion is implicitly or allusively delivered. This condition makes this kind of discussion within RPGs tend to be interpretive.

As seen from Table 2, exposition, explanation, and discussion tend to be interpretively delivered on all game genres. In a language learning context, this condition implies that if the games are applied to learn the four genres, the students will learn about these four genres at a conceptual or abstract level. Learning an abstract concept points out that the games could be used as an alternative example of how the four genres are applied in reality in a game context. Second user's function, explorative, requires gamers to explore the elements of the games to reveal the text genres within the games. All games have tutorials and those tutorials are delivered in a procedure text genre. The differences lie on where to and how to access those tutorials. In fighting games like Capcom's *Street Fighter IV Champion Edition*, for instance, gamers mostly have to access command list through option menu or pausing the games to check how to deliver an attack. This how to is a procedure text which is delivered through commands and animation. In strategy and card games like Square Enix's *Final Fantasy Tactics: the War of the Lion* and CD Projekt Red's *Gwent: the Witcher Card Game*, for examples, the tutorials are accessed while playing the games for the first time. These differences indicate that exploration is different for each game.

As seen from table 2, exploration mostly occurs on procedure and descriptive texts in any game genres and on narrative texts in any game genres excluding strategy, action (strategy), Puzzle/Strategy (Role Play), and Action/Role Play (Strategy). This fact that exploration is predominant in almost all game genres is understandable since games dichotomically consist of game mechanics and game stories with the former revolves around how to and what is all about and the latter with what it tells. In language learning context through text genres, teachers will find it convenient to ask their students to access game genres to have fun while learning on procedure, descriptive, and narrative texts.

The third user's function, as Aarseth (1997) proposes, is configurative. This user's function, when applied in the context of text genres as a part of game mechanics, gives gamers freedom to adjust the mechanics as the gamers see fit. Since text genres are a part of game mechanics, adjusting the mechanics means adjusting the text. Most games are adjustable in terms of game controllers or what buttons you would assign for actions. Yet, adjustment is not limited only to the controller scheme but also to the story route or narrative branch and graphics. In CD Projekt's *The Witcher III: Wild Hunt*, for instance, gamers are provided with options to branch out the story and thus, the outcomes and endings received by gamers might be different depending on the choices made. If the outcomes and endings acquired are not what the gamers expect, they could replay the scenes and adjust the selection to obtain what they desire. Adjustment or modification is also executable in a graphic context through the Self Development Kit (SDK) and modding technique, though not all games have this feature. *The Witcher III: Wild Hunt* is an example of a game where modding is applicable.

The three configurations imply that the first configuration is limited since it revolves around adjusting the control scheme only, the second offers much freedom but is limited in narratives, and the third offers greater freedom since gamers could change almost any game elements. In text genre learning context, the first only provides a lesson on how procedure might be executed through different

means with the same result, the second a lesson on how narratives might have different conclusions through different actions, and the third a lesson to rewrite any text genres found in the games. Time consumption is the issue with the first being the shortest, the second being mild through replaying, and the third the longest with an extra ability of modding required. As seen from table 2, text genres which utilize configurative user's function are generally the same as those with explorative genres, procedure, descriptive, and narrative. The difference is on the configuration type with mostly falling into the first type. The second and third types are found in games with a role-play status. In the text genre learning context, the second and third types of configurative users' functions might be responded to differently since the abilities of playing the games are different for each gamer.

To sum up, functionality serves as a guideline for whether non-language learning games have the predominant text genres as intended to study or not. If the teachers intend to give a task to the students to identify the generic structures of text genres, they might refer to games with text genres delivered in explorative user's functions as seen from the table. If the teachers intend to show to the students that text genres conceptually might take different forms, not as what the generic structures generally tell, they might want to refer the students to games with text genres in interpretive user's functions. If the teachers intend to have an interactive participation at a higher degree of freedom than games with explorative functions, they might ask the students to play games with text genres structured in configurative user's functions.

3.1.2 Usability

Usability deals with what game platforms are required to play the games. The concerns over usability revolve around the availability and the familiarity of the game platforms and the games themselves. The first refers to whether the students asked to play the games could get their hands the game platforms. Thus, the fundamental principle in using games for non-gaming purposes like language learning is to ensure that the games are available on multiple platforms. Usability concerns whether games are accessible and familiar to learners in terms of platforms and gameplay experience. Findings indicate that usability determines the *feasibility* of classroom implementation and directly affects learner engagement.

Participants stressed that even highly functional games fail pedagogically if students cannot access or operate them: *"A great game loses its educational value if students struggle just to install or run it."* (GE1, FGD), Another participant highlighted familiarity as decisive: *"Students who already play similar games can focus on language tasks, while others are still learning the controls."* (RS1, FGD)

In terms of practical application, teachers need to make informed decisions regarding platform selection, as each platform affords different instructional possibilities and constraints. Mobile games are particularly suitable for short, focused tasks, functioning effectively as gap fillers due to their high accessibility and ease of use. In contrast, PC and console games are better suited for immersive learning activities, such as narrative exploration or descriptive writing tasks, where rich visualization and sustained engagement are required. Although virtual reality (VR) games offer the highest level of immersion, their limited availability and technical demands often restrict their feasibility in most classroom contexts.

Instructional strategies should also be adjusted based on students' familiarity with both the game and the platform. When learners demonstrate high familiarity, teachers can design enhancement tasks that encourage deeper linguistic analysis, such as examining mood, tone, or character traits within in-game descriptions. For students with moderate familiarity, guided playthroughs or structured walkthroughs can help scaffold learning while maintaining engagement. In cases of low familiarity, tutorials or observation-based tasks are more appropriate, allowing students to focus on language input without the cognitive burden of mastering gameplay mechanics. For example, when assigning Skyrim for a descriptive writing activity, a teacher may provide screenshots and short gameplay clips to students unfamiliar with role-playing games, rather than requiring full gameplay. This approach reduces cognitive load while still enabling learners to engage meaningfully with descriptive language features.

Since there is not best platform to play games in regard to learning languages, teachers need to consider the pros and cons of the intended platform. In Bethesda's *Elder Scrolls V: Skyrim*, for instance, is officially available for consoles, PC, and VR and unofficially available for smartphone. If the teachers, for instance, plan to assign their students with descriptive text focusing on race description. There are ten playable races, namely the High Elf Altmer, the humanoid reptile Argonian, the Wood Elf Bosmer, the half man half elf Breton, the Dark Elf Dunmer, the fair-skinned Imperials, the humanoid feline Khajiit, the pale-skinned Nord, the Orc, and the dark-skinned Redguard. Since description is strongly linked to visualization, platform selection might be a crucial issue. The following scheme might apply before a decision is taken:

Table 3. Considerations on Platform Selection

	Portability	**Immersion**	**Visualization**
Console	Low	Mid	High
PC	Low	Mid	High
VR	Mid	High	High
Mobile/Handhelds	High	Low	Mid

The considerations in Table 3 are constructed from general perspectives since case-based issues tend to be technical. Portability refers to whether the game platforms have the ability to ignore chrono-spatial barriers when played, immersion to the level of blending between the gamers and the game world, and visualization of how textual elements are brought into images, pictures, and effects. Consoles like PlayStation, Xbox, and Wii tend to have low portability since they are designed for home playing, not outdoor ones. They have mid immersion in terms of being bridged by controller when game world is accessed. In terms of visualization, consoles tend to have a high level of visualization since they are purely built for gaming. Depending on the generation, the higher the generation, the better the abilities of the consoles in projecting high-end visualization. PCs share the same features as consoles, with higher chances of upgrading any mechanical elements, including the visualization. VR excels mainly in immersion since the gamers could experience the game world as if they were the dweller of the world. Mobile/handhelds excel in portability, but they have the lowest immersion in terms of being a device that is not mainly constructed for gaming.

When the considerations on platform selection are taken in the context of text genre learning like the case of race description on Bethesda's *Elder Scroll V: Skyrim*, the teachers need to align their purposes with the game platforms and the predominant nature of the text genres. As mentioned before that description tends to require visualization, the priority should be given to visualization element. Immersion might come next when the availability of the device has been assured. Portability might come next before immersion, considering that mobiles are highly accessible. Considering these three elements of the game platforms might help the teachers in scheming what to do when asking the students to use games in text genre context.

The second element of usability is familiarity which refers to how familiar gamers with the game platforms they play the games on and the games they play. The familiarity between these two domains might result in the following relations:

Table 4. Familiarity Level

Levels	**Game Platforms**	**Games**	**Actions**	**Games as**
High	Familiar	Familiar	Enhancement	Core
			Engagement	Gap Fillers
Mid	Familiar	Unfamiliar	Playthrough	Core
			Walkthrough	Gap Fillers
	Unfamiliar	Familiar	Manualization	Core
			Manualization	Gap Fillers
Low	Unfamiliar	Unfamiliar	Tutorial	Core
			Familiarization	Gap Fillers

A high level of familiarity indicates that the students are familiar with the game platforms and the games. Thus, the actions taken by the teachers for the students should be enhanced if the games are treated as the core in the language learning process. Enhancement refers to immersing oneself deeper into the game world by providing much difficult task in regard to the game playing. In the case of race description in Bethesda's *Elder Scrolls V: Skyrim*, for instance, the enhancement could be exercised by emphasizing on mood building in the race description. This can be done through examining the lores of each race in Tamriel, the setting of *Elder Scrolls* series, by exploring the world or accessing the wiki of the game. On the other hand, engagement is exercised if the game is intended only for gap fillers. In engagement, the teachers could ask the students to engage the game based on what they are attracted to in the game with a guideline on the description of the race. Unlike enhancement, which is teacher cantered, engagement is student cantered with the purpose of independent learning in controlled learning context.

Mid-level of familiarity indicates that the students are either familiar with games but unfamiliar game platforms or vice versa. Playthrough refers to playing a game from the start to the end of the game. This action is exercised if the unfamiliarity is on the game and the game is treated as a core. The aim is to give a clear picture of the game and to disclose a view on what text genres could be learned from the game. If the game is treated as a gap filler, walkthrough, which focuses on the purposive exploration of area in the game world, is the action. In an open world RPG like *Elder Scrolls V: Skyrim* context, playthrough might be impossible to be done in one time play. Thus, finishing a quest to support the enhancement of comprehension over race description. On the other hand, walkthrough is done to draw interest from the students by playing a quest with various possible ways of finishing it. In relation to mid-level of familiarity with unfamiliarity over the game platforms could be solved by taking a manualization action, in which explanation over the use of game platforms is done by the teacher. This action is done for both game treatment as a core and as a gap filler.

Low level of familiarity, in which unfamiliarity occurs on both games and game platforms, is solved through a tutorial if the game is treated as a core, and familiarization if the game is treated as a gap filler. What makes the two actions different is that tutorial tends to be delivered in a procedural step-by-step configuration, while familiarization tends to be user-centered – implying that the users can start the comprehension over the game platforms and the games from any part they want.

To sum up, usability is the consideration that concerns the availability and the familiarity of the games and the game platforms. These two sub-elements of usability are executed after ensuring the functionality of the selected games. Concerning whether the games are treated as a core or as a gap filler is crucial since it decides the actions taken by the teachers. After guaranteeing the functionality and the usability, the teachers need to consider the normative elements of the selected games.

3.1.3 Normality

Normality refers to whether the selected games are considered normal to play for certain ages in a certain society. It also refers to whether the selected games might create a distraction in the language learning process. The former is called normative while the second is called normity. Normative deal with norms, legal, cultural and religious issues surrounding the selected games. Normatives might circumnavigate in a general sense and specific sense. The former refers to norms, legal, cultural, and religious issues in the societal context, while the latter refers to the classroom, group, and individual context. Games like Bethesda's *Elder Scrolls V: Skyrim* and CD Projekt Red's *The Witcher III: Wild Hunt*, though having explorative and configurative attributes regarding the text genre learning, contain adult materials which might violate the normative, cultural, and religious values in some places. On the other hand, games that rely on text adventure, like Capcom's visual novel *Ace Attorney* series, might not fit with the reading culture of a classroom or a group. MOBA-like PUBG Company's *PUBG*, which relies on action rather than reading, might fit with students who love shooting games, but the explorative and configurative attributes might hinder the learning process. These general and specific normative need to be addressed by the teachers.

Normality addresses whether games are socially, culturally, and ethically appropriate, and whether they introduce distractions that interfere with learning. Findings indicate that normality is the most decisive factor in determining overall compatibility. FGD participants repeatedly emphasized contextual sensitivity: "A game might be perfect linguistically, but unacceptable culturally or religiously in certain classrooms." (RS3, FGD). Game developers acknowledged this concern: *"Many commercial games assume adult audiences. Teachers must filter content carefully."* (GD1, FGD). Normative considerations are essential when integrating digital games into language learning, as not all games are appropriate for every educational context. Teachers should avoid selecting games that contain excessive violence, sexual content, or gambling-like mechanics, and should ensure that game choices align with school regulations, parental expectations, and broader cultural and religious values. Attending to these normative factors helps maintain a safe and acceptable learning environment while preserving the pedagogical integrity of game-based activities.

In addition to normative alignment, teachers must actively manage potential distractions that may arise during gameplay. Inward distractions, such as software bugs, updates, or downloadable content (DLCs), can interrupt learning and should be addressed through prior technical checks and controlled settings. Outward distractions, including excessive play, emotional overinvestment, or aggressive behaviour, require pedagogical interventions such as setting clear time limits, defining explicit learning objectives, and providing structured tasks. For example, rather than assigning full gameplay of The Witcher III, a teacher may use carefully selected dialogue transcripts and cutscenes to analyse discussion texts. This approach allows students to focus on language features while avoiding exposure to adult content and minimizing distraction.

Meanwhile, normality revolves around the necessity to reveal possible distractions coming out of the selected games and game platforms to keep the students on the track of learning while playing scheme. Distractions are classified into inward and outward distractions. The former refers to distractions coming from the games or the game platforms, which influence the gamers, while the latter refers to distractions from the gamers, which influence the games and their platforms. The following table 5 might assist the comprehension of these distractions:

Table 5. Distraction Types

Distractions	Examples	Preventive Actions
Inward	bugs, glitches, difficulties, updates, downloadable contents, errors, and other technical and mechanical problems	Checking Fixing Control
Outward	addiction, aggressiveness, emotion control, impatience, and other psychological problems	Control

These two distractions are reciprocally connected. Bugs, for instance, might raise the level of impatience, which influences how the games are played. When the game is intended for a language learning companionship, this condition might distract the gamers from learning. An additive feature like downloadable contents (DLCs) in game purchases and gambling mechanized slot-like draw/*gacha*, might also contribute to the emergence of distraction. In most games, curiosity to engage in new additional content, such as additional story or additional equipment, might distract the students. Even the gameplay of the game itself might distract the students from their real purpose of playing the game in learning context. In Capcom's *Ace Attorney* series, for example, students could learn about the report genre in an autopsy context. This autopsy report will help the main protagonist, the attorney Phoenix Wright, in solving the case. But the game's multiple plot routes and endings could distract the students from focusing on the task of text genre-based learning. The actions required to prevent these distractions from happening are checking and fixing if the distractions are mechanically or technically related, controlling if the distractions are related to the game content and the students.

3.1.4 Compatibility Rubric

Departing from the three considerations as discussed on the first subsection, a rubric of compatibility is formulated. Functionality primarily bridges the learning materials with the games. Since most games are basically delivered using language, taking functionality as a parameter in the rubric means positioning it as a neutral element. This position implies that all levels of compatibility will have no differences. On the other hand, usability is a non-neutral element with a deciding point since one of its two sub-elements, familiarity, is metrically measurable using hierarchical ranking. The same position as a non-neutral with a more deciding influence goes to normality since it deals with potential violation against norms and potential emergence of distraction which might ruin the whole language learning process with games as the learning companion. The following is the rubric:

Table 6. Compatibility Level Rubric

Compatibility Level	Functionality (Text–Game Alignment)	Usability (Access & Familiarity)	Normality (Norms & Distraction Control)	Example
Compatible	Teaching objectives align clearly with the game's predominant text genre. Interpretive user functions support conceptual learning; explorative or configurative functions support applicative learning.	Game and platform are readily available; students show high familiarity with both.	No violations of cultural, legal, or institutional norms; preventive measures for distraction are clearly planned.	Students analyze narrative structure through a story-driven RPG they already know, using guided tasks and time limits.
Appropriate	Teaching objectives align with the game's predominant text genre, but genre realization may be less explicit or require scaffolding.	Game and platform are available; students show moderate familiarity and need guidance.	No major normative violations, but distraction controls are partially planned.	Teacher uses selected gameplay segments of a strategy game to teach procedure texts with walkthrough support.
Discordant	Teaching objectives and game text genres are weakly aligned or only superficially connected.	Game or platform availability is limited; students show low familiarity.	Normative issues are present, or distractions are unmanaged.	A complex action game is assigned without guidance, causing confusion and off-task behaviour.

Fundamentally, all levels are functionally compatible, but differences in familiarity level, violations of norms, and prevention schemes over distractions make the levels different. A game is said to be compatible when functionality is ensured in terms of an alignment between teaching purposes and the games played, when the familiarity level is high, when violations against norms are not found, and when a preventive scheme is formulated. When familiarity level is mid and preventive scheme to avoid distraction is not formula table, the level of compatibility is appropriate. On the other hand, when the familiarity level is low, normative violation is exposed, and preventive scheme is unformattable, the level is discordant.

Teachers are encouraged to apply the FUN rubric as a pre-instructional decision-making tool through a structured three-step process. The first step is to consider functionality by identifying the target text genre, such as narrative, procedure, or description, and examining whether the selected game predominantly supports this genre through interpretive, explorative, or configurative user

functions. This ensures that the linguistic features embedded in the game align with the intended learning objectives. The second step involves evaluating usability conditions, including students' access to the game and its platform, as well as their level of familiarity with both. Based on this assessment, teachers can adjust instructional strategies by providing tutorials, guided walkthroughs, or enhancement tasks to scaffold learning appropriately. The final step is to assess normality and potential risks by screening the game for cultural and ethical appropriateness and identifying possible sources of distraction. Teachers can then determine whether full gameplay, partial gameplay, or mediated materials, such as gameplay clips or text transcripts, are most suitable for achieving learning goals while maintaining a focused and acceptable learning environment.

3.2 Discussion

This study sought to address the question of how non–language-learning digital games can be evaluated for their compatibility with text genre–based language learning. The findings demonstrate that such compatibility can be systematically examined through three interrelated dimensions of FUN. By applying these dimensions, the study responds directly to the research question by clarifying the conditions under which non-educational games can support language learning goals without disrupting pedagogical coherence.

The findings align with Thomas's (2012) distinction between games used as core instructional tools and as supplementary gap fillers, particularly in highlighting why non-language-learning games are more suitably positioned as supplementary resources. In this role, issues of usability and normality become decisive, while functionality determines whether the linguistic content embedded in the games meaningfully supports targeted text genres. This extends Hamari and Nousiainen's (2015) compatibility perspective by translating abstract elements, including beliefs, practices, and goals, into operational classroom considerations. The emphasis on functionality also supports prior work on game affordances and ergodic texts (Aarseth, 1997; Gordon et al., 2019), showing that learners engage with text genres through interpretive, explorative, and configurative user functions. Rather than theorizing affordances in general terms, this study demonstrates how such affordances can be identified and evaluated in relation to specific genre-based learning objectives, as emphasized in genre pedagogy (Derewianka, 2003).

The FUN framework advances research on game-based language learning by offering a practical and pedagogically grounded evaluative tool. While previous studies have emphasized motivation, engagement, or technological affordances, FUN foregrounds instructional alignment and contextual feasibility. It integrates linguistic goals (functionality), technical and experiential conditions (usability), and ethical–contextual considerations (normality) into a single framework that is accessible to teachers and applicable across diverse learning contexts. Importantly, FUN does not attempt to exhaustively capture all possible game variables. Instead, it deliberately excludes highly complex dimensions—interactivity, determinability, and ludicity—to preserve usability and clarity. This selective focus positions FUN as a *screening and planning framework* rather than a comprehensive game evaluation model, addressing a practical gap in existing literature.

The findings indicate that interactivity, determinability, and ludicity, while theoretically important, introduce analytical complexity that exceeds the immediate needs of classroom decision-making. Interactivity, as conceptualized by Weber, Behr, and DeMartino (2014), involves multiple dimensions, such as AI, customization, and perceptual persuasiveness, that require fine-grained technical analysis. Including these dimensions would significantly expand the scope of compatibility assessment and reduce its practicality for teachers.

Similarly, determinability, which concerns the clarity and assessable of learning outcomes (Capra et al., 2018), complicates the instructional "inner layer" (Casañ Pitarch, 2018), particularly because non-language-learning games are often used as supplementary resources rather than primary instructional tools. In genre-based language learning, which prioritizes text, purpose, meaning, and choice (Derewianka, 2003), incorporating determinability risks shifting attention away from qualitative

language engagement toward overly rigid outcome measurement. Ludicity, or the degree of playfulness, further complicates evaluation due to its genre-specific and subjective nature (Purnomo et al., 2016). Assessing ludicity requires attention to microstructures such as player preferences, ideological influence, and diegetic coherence (Aarseth, 1997), which inflate the "outer layer" of gamification and hinder efficient compatibility checking. Excluding these variables thus reflects a methodological choice to prioritize applicability over theoretical exhaustiveness.

Teachers can use the FUN framework as a structured guide for selecting, adapting, and implementing digital games in text genre–based language learning. Functionality helps teachers identify whether a game meaningfully represents the target text genre; usability assists in determining platform feasibility and learner readiness; and normality ensures cultural, ethical, and instructional appropriateness. Together, these dimensions support informed pedagogical decisions without requiring advanced technical expertise. For game developers, the FUN framework highlights how linguistic affordances already embedded in commercial games may be leveraged for educational purposes. Understanding how game genres align with text genres and user functions can inform the design of narratives, tutorials, and optional modes that enhance educational adaptability while preserving entertainment value. Developers aiming to broaden their audience may benefit from considering usability and normality as design principles that facilitate classroom adoption.

The application of FUN is shaped by situational constraints, including access to technology, institutional policies, cultural norms, and learner diversity. Teachers' familiarity with games and time constraints within curricula also affects implementation. While FUN does not eliminate these challenges, it offers a transparent framework for negotiating them, enabling educators to make context-sensitive decisions grounded in pedagogical intent. Overall, this discussion demonstrates that the FUN framework responds directly to the research question by clarifying how compatibility between non-language-learning games and text genre–based language instruction can be systematically evaluated. By emphasizing practicality, alignment, and contextual awareness, the framework contributes a balanced and actionable perspective to the field of game-based language learning.

4. CONCLUSION

This study proposes the FUN framework as a systematic response to the problem of evaluating the compatibility of non–language-learning digital games for language learning purposes, particularly within informal and supplementary learning contexts. By synthesizing insights from game genre functions (Vargas-Iglesias), genre-based language pedagogy (Derewianka), user functions in ergodic texts (Aarseth), and gamification processes in language learning (Casañ Pitarch), the FUN framework addresses a critical gap in existing literature: the absence of a practical, pedagogically grounded tool to guide teachers' decision-making when integrating commercial digital games into language instruction. The FUN framework resolves three persistent challenges in game-based language learning. First, it clarifies what linguistic work games enable through the functionality dimension by mapping dominant text genres and user functions to instructional goals. Second, it accounts for contextual feasibility through usability, emphasizing platform availability and learner familiarity as prerequisites for meaningful learning. Third, it foregrounds ethical and instructional appropriateness through normality, ensuring that cultural norms and potential distractions are considered alongside pedagogical value. Collectively, FUN shifts the focus from whether games can be used for language learning to how and under what conditions they can be used responsibly and effectively, offering an alternative qualitative rubric for compatibility assessment.

Despite its contributions, this study has several limitations. First, the FUN framework remains a conceptual and analytical model that has not yet been empirically validated through classroom-based implementation. Second, the findings are informed by a limited expert sample, consisting of researchers, gamification experts, and game developers, which may restrict the generalizability of perspectives to broader educational contexts. Third, the analysis is constrained by selected game examples, and different genres, platforms, or cultural settings may yield additional considerations not

captured in the current framework. Future research should seek to empirically validate the FUN framework through classroom-based studies, examining its effectiveness in guiding teachers' game selection and instructional design. Further studies may also focus on teacher usability testing to evaluate how easily educators with varying levels of gaming experience can apply FUN in real teaching contexts. Additionally, comparative research is needed to contrast FUN with existing game evaluation or gamification models, particularly those emphasizing motivation, engagement, or learning analytics, to assess its relative strengths and limitations. Addressing these avenues will not only refine the FUN framework but also strengthen its contribution to the growing field of game-based language learning.

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