

TECHNOLOGY IN PRACTICE FORUM



Educational escape rooms for French grammar: A technology-in-practice approach

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Abstract

Educational escape rooms (EERs) have emerged as interactive, game-based tools in technology-enhanced language education, yet their application in languages other than English remains underexplored. This technology-in-practice piece presents a classroom-based innovation: a web-based EER designed to support grammar instruction in French as a foreign language, using verb conjugation as an illustrative challenge. Implemented in a Malaysian university context, the EER was embedded through a four-stage instructional process—presentation, practice, play, and personalization—drawing on pedagogical, game-for-learning, and contextual elements. Observed benefits included increased learner engagement, improved grammatical accuracy, and enhanced cognitive flexibility. However, the approach also presented challenges related to teacher workload, shifting instructional roles, and the need for design literacy. By critically examining both opportunities and limitations, this article contributes to ongoing discussions on the integration of digital tools in language education and the conditions necessary for their sustainable and meaningful use.

Keywords: *Educational Escape Rooms, Grammar Instruction, Foreign Language Education*

Language Learned in This Study: *French*

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Introduction

Educational escape rooms (EERs) have emerged as a promising digital tool in the evolving landscape of technology-assisted learning. These interactive, narrative-driven environments challenge participants to solve puzzles, complete tasks, and uncover clues within a time-bound scenario—typically to “escape” a given space or crisis—and serve as a gamified approach to promote collaboration, critical thinking, and engagement by embedding subject-specific tasks within immersive storytelling (Damaševičius & Sidekėskienė, 2025). By combining game mechanics with curricular content, EERs offer an experiential form of learning that fosters a sense of urgency, curiosity, and purposeful problem-solving (Veldkamp et al., 2020), contributing to their growing adoption in foreign language (FL) education, which increasingly values active, learner-centered approaches to promote motivation and meaningful language use. In English language teaching, for instance, EERs have been implemented to enhance vocabulary acquisition, reading comprehension, and cultural learning (Bellés-Calvera & Martínez-Hernández, 2022; Nasri et al., 2024), often demonstrating promising outcomes in terms of learner motivation and participation (Stollhans, 2020). However, despite this growing interest, their application in languages other than English (LOTE) remains underexplored, particularly in relation to how such tools can be adapted to different linguistic systems, learner profiles, and classroom constraints.

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As LOTE teachers, we aim to address this gap in this technology-in-practice piece by presenting our use of web-based EERs in a French-as-an-FL classroom, using grammar—specifically verb conjugation—as an illustrative focus. Our practice is grounded in the concept of open, grassroots innovation (Poth, 2021), where technology-driven solutions emerge organically from local teaching contexts to address specific pedagogical needs. Rather than beginning with formal design models in the literature (see, for example, Wolf et al., 2024)—which we found to be predominantly methodological and explicitly or implicitly grounded in a design mindset that casts educators as designers or quasi-“game masters”—we focused on what was feasible, meaningful, and sustainable within our actual classroom conditions, shaped by limited time, diverse learners, and evolving curricular goals. Many language educators in similar contexts have created their own EER scenarios, sharing ideas informally through blogs, workshops, and online forums, often independently of established frameworks (see, for example, <http://www.teachaboo.com/tag/escape-the-classroom/>). These grassroots innovations reveal instructional needs overlooked by top-down frameworks—such as simplified EER formats suitable for routine classroom use or adaptable to low-resource settings (Damaševičius & Sidekerskienė, 2025). This is the perspective our case seeks to contribute to: advancing ongoing conversations about FL teaching in the digital age and demonstrating how interactive digital tools can meaningfully bridge persistent pedagogical gaps.

Instructional Context

We were principally based at a Malaysian university where students had access to various optional LOTE courses. We conducted our trial in a French-as-an-FL course consisting of 25 sophomores (16 females, 9 males) aged 20 to 22. The class was linguistically diverse: 17 students from China spoke Chinese (first language, L1), English (second language, L2), and French (third language, L3); six from Malaysia spoke Malay (L1), English (L2), and French (L3); and two from Indonesia spoke Indonesian (L1), English (L2), and French (L3). The course was led by a female Malaysian instructor, a member of our research team, who shared the same linguistic background as the local students, held a PhD in French Literature, and had extensive French teaching experience. Prior to university enrollment, none of the students had been exposed to French. However, they had completed two consecutive semesters of French language learning before engaging in this practice. A summative assessment conducted at the end of the previous semester indicated their proficiency levels were approximately at A2 on the Common European Framework of Reference for Languages (CEFR). At this stage, students could understand and use familiar everyday expressions, communicate in simple and routine tasks requiring a direct exchange of information, and describe aspects of their background and immediate environment using basic grammatical structures.

The specific course, delivered over two hours per week, was conducted in partial immersion—meaning the teacher and learners alternated between the target language (French) and the shared language (English), a practice considered beneficial for beginning learners, especially given their higher proficiency in English (approximately C1 to C2 on the CEFR). Despite students’ considerable interest in learning, informal conversations, semester-end feedback, and formal assessments indicated that they faced significant difficulties with grammar learning, particularly verb conjugation, making it a logical and necessary focus for pedagogical intervention. Unlike vocabulary or sentence structure, conjugation required students to memorize a range of tense-specific endings, distinguish between regular and irregular forms, and apply morphological changes based on tense, mood, and subject pronoun (Xavier & Chia, 2024)—tasks made more challenging by the absence of comparable inflectional systems in students’ previously acquired languages (e.g., Chinese, Malay, and Indonesian) (McManus, 2021). Specifically, our students exhibited a range of difficulties: subject-verb agreement errors, such as *il finissent* instead of *il finit* (where *finissent* was a plural verb form mistakenly used for “he finishes”); confusion between irregular verbs, such as *ils ont* (“they have”) versus *ils sont* (“they are”); incorrect auxiliary selection in the *passé composé* (past), such as *j’ai allé* instead of *je suis allé* (“I went”)—a common mistake when students applied the auxiliary *avoir* (“to have”) to all verbs, even those such as *aller* (“to go”) that require *être* (“to be”); and tense confusion, such as using *j’ai fini* (“I finished”) instead of *je finissais* (“I was finishing”) when describing habitual past actions—revealing difficulty distinguishing between the *passé*

composé and the *imparfait* (imperfect).

While structured drills did provide necessary reinforcement, they often became monotonous and led to rote memorization. To make learning more interactive, the teacher introduced peer collaboration, guided sentence construction exercises, and communicative activities where students practiced conjugations in dialogues or short writing tasks. However, these methods did not consistently produce accurate usage in spontaneous communication, as students tended to rely on memorized conjugation forms rather than actively recalling grammatical rules in context (Bryfonski & Mackey, 2023). These challenges underscored the need for an interactive approach with a delicate balance between form-focused instruction and meaningful language use (Xavier & Chia, 2024). Given that both the teacher and students had access to smartphones, laptops, and digital platforms in the classroom—and in alignment with institutional proposals on digitalizing teaching—we initially explored various technology-enhanced learning methods, as established in the literature (Poth, 2021). These included online grammar quizzes, verb conjugation websites, and multimedia resources such as instructional videos. However, we noticed that most available platforms focused heavily on isolated linguistic forms and lacked integration into meaningful communicative contexts, leading students to perceive them as repetitive digital versions of traditional drills. This ultimately characterized our practice as a technological instrumentalist approach, where technology served merely to digitize conventional methods rather than transform the learning experience.

While EERs have been widely used, our idea of incorporating them into our teaching did not emerge until recently, when one of our students excitedly shared their experience of playing an escape room themed around *Resident Evil*, with one tough puzzle involved following a sequence of conditional instructions in English (e.g., “If the mixture turns blue, add two drops of solution B; otherwise, increase the temperature by five degrees”). Initially, the student struggled to process the instructions under pressure, but repeated exposure and the urgency of solving the puzzle forced them to internalize the sentence patterns. By the end of the game, the student had unintentionally mastered conditional structures and sequential commands in English because of the need to recall and apply language dynamically. This conversation sparked a realization within our team—if an escape room could help a player effortlessly memorize and apply complex patterns, could a similar mechanism, which transformed language exercises into a high-stakes, problem-solving experience, be leveraged to reinforce grammar rules, such as verb conjugation?

Description of Practices

Inspired by the concept of low-tech but high-impact FL teaching (Hasanah & Pradipta, 2021), which maximizes the effectiveness of language instruction by leveraging readily available digital tools to create interactive learning experiences, we developed our EERs using Genially (<https://genially.com/>), a web-based platform that allows users to design interactive presentations, games, and visual content. This choice proved efficient, as we had limited expertise in online game design, which might otherwise require coding skills or access to specialized software. While embracing various theories underlying EERs—such as the constructivist learning theory (active knowledge construction through experiential tasks) (Piaget, 1973), task-based language teaching (meaningful language use through problem-solving) (Ellis, 2003), the noticing hypothesis (directing learners’ attention to grammatical forms) (Schmidt, 1990), and multimedia learning theory (enhancing processing and retention through verbal-visual integration) (Mayer, 2012)—as well as foundational principles of grammar instruction, including contextualization, communicative appropriateness, progressive complexity, repeated exposure, and timely feedback (Xavier & Chia, 2024), we, as illustrated in Figure 1, considered the following elements in designing EERs:

Learning elements, which centered on *integration into teaching* (embedding EERs within existing curricula, serving as both authentic practice and formative assessment tools following direct instruction), *objectives* (aligning with teaching goals and targeting students ability to use grammar accurately and appropriately per instructional outcomes), *progressive difficulty* (adapting to students’ cognitive load by progressing from simple, high-frequency grammatical structures in predictable sentences to more

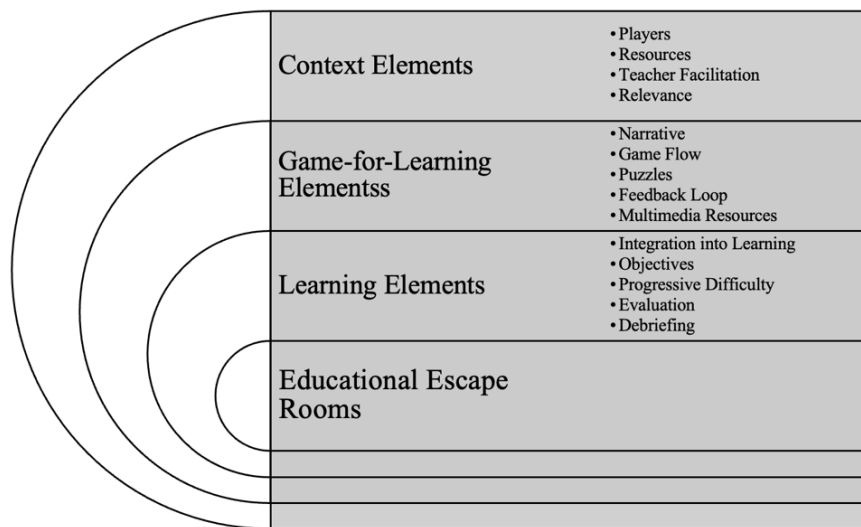
complex linguistic contexts), *evaluation* (tracking student responses in real-time, enabling students to monitor their own learning, and allowing the teacher to identify common errors and provide targeted scaffolding), and *debriefing* (encouraging post-game reflection, where students discuss their key takeaways while receiving teacher feedback to consolidate learning).

Game-for-learning elements, which were categorized by *narrative* (a cohesive storyline that provides a meaningful context for completing tasks and serves as a cognitive and emotional driver that immerses players in problem-solving while reinforcing learning objectives), *game flow* (a structured, level-based progression that ensures a logical sequence of tasks and keeps students engaged while reinforcing learning objectives), *puzzles* (task-based challenges designed to promote active recall, problem-solving, and the practical application of grammar rules), *feedback loop* (providing instant feedback by explaining why a particular response is correct or incorrect, guiding students toward self-correction by offering contextual hints, and allowing students to revisit challenges until they reach the correct answers), and *multimedia resources* (incorporating visuals, interactive elements, and contextual cues to enhance comprehension, engagement, and memory retention).

Context elements, which focused on *players* (students working either independently or collaboratively in groups), *resources* (such as time limits set to simulate authentic problem-solving conditions and technological accessibility to ensure the design is replicable and adaptable to general classroom settings), *teacher facilitation* (defining the instructors role as a moderator, providing hints when needed, guiding discussions during debriefing, and monitoring engagement), and *relevance* (ensuring that the games content, storyline, and vocabulary align with students' linguistic and cultural backgrounds and interests to increase relatability and engagement.)

Figure 1

Elements in Designing Educational Escape Rooms



One example of our EER designs, titled *Conjugation Crisis in Café Paris*, was implemented at the beginning of the latest semester. This activity, which lasted approximately 15 minutes—including five minutes of pre-EER task explanation and ten minutes of gameplay—reflected our typical design length, though some ran as long as 25 minutes when more puzzles were included. By contrast, durations reported in previous research—typically around 60 minutes and sometimes extending up to 120 minutes (Veldkamp et al., 2020)—seemed impractical in our context, as dedicating most or all of a class session to EER gameplay risked sidelining essential instructional goals and often led to early, high-proficiency

finishers losing focus while waiting for others. Short, targeted EERs allowed for better classroom management, timely debriefing, integration of other tasks, and smoother alignment with the pacing of our two-hour weekly course.

The EER presented was aligned with the university curriculum, which required students to progress toward the B1-B2 level of the CEFR while consolidating linguistic knowledge acquired in previous semesters. While one primary focus was on teaching and learning advanced conjugation across tenses and moods such as *imparfait* (imperfect) and *conditionnel* (conditional), the course requirement also incorporated a review of simpler tenses previously learned, including *présent* (present), *passé composé* (past), and *futur proche* (near future), to reinforce foundational concepts. The teacher typically introduced grammatical structures through explicit instruction and guided practice to ensure students first developed a clear conceptual understanding of verb conjugation rules. Lessons included contextualized examples, sentence construction exercises, and communicative activities designed to integrate controlled conjugation practice into language use. Subsequently, the EER was implemented as an independent task, serving not only as an interactive language-use activity but also as an assessment-for-learning tool.

A partial script for the EER is provided in [Appendix A](#). Given the students' beginning-level French proficiency and diverse backgrounds, we contextualized the game within a café setting—a familiar environment for students—and used English as the primary instructional language. The narrative revolved around a rush-hour crisis at the café, where the head chef had gone missing just as a Michelin critic was expected to arrive. Students were tasked with navigating a series of challenges and applying French verb conjugations correctly to save the café from losing its Michelin star. A key feature of the game was its progressive difficulty, with each room requiring increasingly cognitively demanding tasks. Accordingly, we designed five sequential challenges to ensure a natural game flow aligned with the learning objectives: *The Missing Recipe Book – Présent*, *Future Menu Planning – Futur Proche*, *The Delivery Delay – Passé Composé*, *The Chefs Secret Notes – Imparfait*, and *The Critics Expectations – Conditionnel*. Each level was introduced with a narrative scenario and a clear task for “escaping” the room, as illustrated in [Figure 2](#).

Within each level, we included various types of puzzles—such as fill-in-the-blank, multiple choice, reordering, and logic grid tasks—that required students to apply correct verb conjugations in contextually rich scenarios aligned with the overarching narrative, as illustrated in [Figure 3](#). For each puzzle, students were required to submit their answers within a set time limit—typically ranging from 20 to 60 seconds—depending on task complexity, in order to maintain a balance between cognitive challenge and engagement. Correct answers unlocked the next stage of the EER, while incorrect responses triggered an immediate prompt for re-attempts to provide opportunities for self-correction and reinforcing grammatical accuracy through repetition.

However, for both correct and incorrect responses, we incorporated instant feedback within the puzzles. This feedback went beyond simply indicating accuracy; it offered concise explanations of relevant conjugation rules, such as reminders about auxiliary verb selection, common irregular forms, and agreement patterns. An example of this, as demonstrated in [Figure 4](#), was students' use of *passé composé* in a multiple-choice puzzle themed around a delayed kitchen delivery. Upon selecting the correct answer—*sont arrivées* (arrived)—students received feedback explaining that *arriver* (to arrive) is a verb of movement that requires *être* as its auxiliary in *passé composé*, and that the past participle must agree in gender and number with the subject, namely *les caisses* (the crates, feminine plural). For incorrect answers, the feedback clarified the difference between verbs that take *être* and those taking *avoir*, noting that most action verbs involving a direct object use *avoir* as the auxiliary instead. If time remained, students were allowed to re-attempt the question using the feedback provided. This immediate, rule-based feedback supported learners in noticing structural patterns and promoted form-meaning mapping.

Figure 2

Designed Narratives and Flow for the Educational Escape Room



Figure 3

Examples of Puzzles

UN NOUVEAU PLAT / VA / CRÉER / LE CHEF / POUR / LE DÎNER

le chef

créer

un nouveau plat

pour

le dîner

va

"The kitchen staff is planning for dinner service using futur proche to describe what they are about to do. Help them organize their notes by putting the jumbled sentence fragments in the correct order!"

00:16

Chef Pierre's journal contains fragmented memories:

Le serveur range les couverts sur le comptoir et regarde souvent vers la porte... Un jour, il a laissé tomber un plateau devant un client important, ce qui a créé un grand moment de silence... Dans la cuisine, il chantait doucement tout en préparant les cafés, comme il le faisait souvent.

ONE SENTENCE DESCRIBES A PAST HABIT OR ONGOING CONDITION-EXPRESSED IN IMPARFAIT. READ CAREFULLY AND CHOOSE THE IMAGE THAT BEST REPRESENTS THAT SENTENCE.

00:13

Figure 4

Examples of Instant Feedback

There was a major delay in the kitchen delivery this morning. The sous-chef is writing a report to explain what happened and when key deliveries arrived.

This step must be done in...

00:29

LES CAISSES DE LÉGUMES APRÈS LE DÉBUT DU SERVICE.

est arrivé ont arrivées sont arrivées

a arrivé

There was a major delay in the kitchen delivery this morning. The sous-chef is writing a report to explain what happened and when key deliveries arrived.

This step must be done in...

00:39

LES CAISSES DE LÉGUMES APRÈS LE DÉBUT DU SERVICE.

a arrivé est arrivé sont arrivées **X** ont arrivées

X Your answer seems to be incorrect. Verbs that describe movement or a change of state, such as arriver, use être as the auxiliary in passé composé. Most other verbs, especially those that take a direct object, use avoir (e.g., Nous avons préparé le dîner.). Also, with être, the past participle must agree in gender and number with the subject.

There was a major delay in the kitchen delivery this morning. The sous-chef is writing a report to explain what happened and when key deliveries arrived.

This step must be done in...

00:31

LES CAISSES DE LÉGUMES APRÈS LE DÉBUT DU SERVICE.

a arrivé est arrivé **✓** sont arrivées ont arrivées

✓ Correct! "Arriver" is a verb of movement and takes être as the auxiliary in passé composé—unlike most verbs, especially those that take a direct object, which use avoir. Since les caisses is feminine plural, the past participle must agree in gender and number, becoming arrivées.

Appropriate acknowledgement, contextualized within a closing narrative, was provided upon completion of the EER, as shown in [Figure 5](#). More importantly, we incorporated multimedia resources, such as online videos explaining conjugation rules, as practical takeaways to support students' ongoing and reinforced learning. The entire process of embedding this EER within the classroom followed what we described as a *Present–Practice–Play–Personification* model. While the *presentation* of linguistic forms by the teacher and the *practice* through controlled activities aligned with conventional instruction, the *play* stage allowed learners to engage in interactive, problem-solving tasks. The *personification* stage extended learning beyond the game itself, encouraging both reflection and ownership.

Figure 5

Closing Narrative and Takeaways for Learners



Félicitations !

Thanks to your sharp thinking and excellent conjugation skills, the team at Café Paris has managed to pull through the evening rush. With the critic impressed and the kitchen back in order, Café Paris retains its prestigious star—and it's all thanks to you. The staff applauds your heroic effort!

All French Verb Tenses Simplified

Le Présent
Le Passé Composé
L'Imparfait
Le Subjonctif
Le Conditionnel
Le Futur Simple
Le Futur Proche
L'Impératif
Le Plus-Que Parfait
Le Futur Antérieur

Watch on YouTube

Some useful resources for reinforcing your learning

At the final stage, specifically, the teacher could use the game dashboard to monitor each student's performance in the EER—identifying patterns in errors, tracking completion times, and pinpointing tenses or conjugation forms that caused the most difficulty. This real-time insight enabled the teacher to provide targeted feedback, reteach difficult points, or assign additional support materials. Simultaneously, students were encouraged to reflect on their learning at the end of the game. They were asked to identify which linguistic feature posed the greatest challenge, what strategies they used to solve the puzzles, and how the EER helped them engage with learning differently. This learner reflection was not only intended to foster metacognitive awareness but also served as a valuable source of diagnostic insight for the teacher. In this way, the personification stage reinforced the *playing-for-learning* purpose of the EER—not merely as an engaging activity, but as a meaningful pedagogical tool that bridged game-based interaction with targeted instructional follow-up.

Practical Benefits and Challenges

While the long-term benefits of using EERs remain uncertain—principally because our implementation was limited in duration—several short-term pedagogical advantages were observed. One key benefit was a notable increase in student engagement, consistent with findings in existing literature (Bellés-Calvera & Martínez-Hernández, 2022; Nasri et al., 2024). Specifically, students appeared to demonstrate greater cognitive engagement through improved focus and a willingness to tackle complex conjugation tasks; emotional engagement through visible enthusiasm and reduced anxiety typically associated with grammar drills; and behavioral engagement by participating more actively and volunteering thoughtful reflections after the game. Learners who had previously seemed disengaged during traditional grammar instruction became more involved when working through EERs. The narrative-driven structure, combined with interactive, puzzle-based mechanics and the multimedia nature of EERs, provided an immersive context in which students could meaningfully apply their grammatical knowledge.

Additionally, students appeared to benefit linguistically and cognitively, as the EER format required repeated retrieval and application of linguistic knowledge within context-rich scenarios. This process supported both declarative knowledge (the explicit understanding of grammatical rules) and procedural knowledge (the ability to apply those rules in real-time communication). Integrated instant feedback—which explained why a given response was correct or incorrect and reminded students of relevant grammatical rules—was important in consolidating learning and helping students notice and self-correct their errors. Notably, we observed increased confidence among many students, who began to participate more actively in various communicative tasks in French and demonstrate more accurate and spontaneous use of grammatical features. This form of retrieval-based learning is expected to strengthen memory retention, enhance the mental organization of linguistic knowledge, and facilitate the transfer of grammatical forms to novel contexts in the long term (Bryfonski & Mackey, 2023). Also, the combination of narrative immersion, time-bound progression and puzzle-solving tasks sustained student attention and reduced the cognitive monotony often associated with repetitive grammar drills. The need to shift between grammatical structures and adjust language choices in response to evolving narrative demands encouraged cognitive flexibility, a crucial component of advanced language processing and executive function in multilingual learners (Poth, 2021). This dynamic use of grammar within goal-oriented, game-based tasks also enhanced learners' attentional control, as they had to monitor accuracy, respond to feedback, and revise their output—all within a limited timeframe.

For the classroom teacher, one important benefit was the ability to track student performance in real time through the digital platform. Previously, the teacher had to spend a considerable amount of time and effort manually monitoring student performance, checking individual answers, and providing feedback—tasks that were often difficult to manage efficiently in a large, mixed-proficiency classroom. With the EER, student responses were automatically recorded and categorized, which enabled the teacher to quickly identify common errors, such as misuse of auxiliary verbs or recurring mistakes with irregular conjugations. This not only reduced the teacher's workload but also improved the precision of

instructional follow-up. The teacher could use these insights to adapt future lessons, provide targeted reteaching, and address persistent gaps more effectively. Furthermore, because students progressed at their own pace and received immediate feedback, the EER facilitated a form of differentiated instruction (Damaševičius & Sidekerskienė, 2025) that would otherwise have been difficult to implement consistently. This shift—from manual oversight to digitally supported, learner-centered facilitation—marked a significant improvement in the overall efficiency of grammar instruction.

However, we also encountered challenges in designing and implementing EERs. One major difficulty was the time-intensive nature of planning and development. Although the web-based platform we used was user-friendly, constructing a coherent narrative, embedding pedagogically aligned tasks, designing puzzles with varying formats and levels of difficulty, and integrating meaningful feedback required substantial preparation. As full-time educators with additional teaching and administrative responsibilities, we found it sometimes too time-consuming to develop complex game-for-learning elements while ensuring alignment with linguistic targets, curricular goals, students' cognitive readiness, the overall teaching process, and context-specific factors such as learner diversity and classroom resource availability. Also, from an aesthetic perspective—though generally considered non-essential in existing research on EER design (Wolf et al., 2024)—visual appeal and interface coherence still influenced the overall learning experience. Some students informally mentioned certain design elements, such as clashing colors, inconsistent fonts, or overly busy visuals, felt unappealing, which momentarily disrupted their immersion in the storyline. As educators without formal training in digital design, we found it challenging to create visually cohesive and thematically consistent content while also maintaining instructional accuracy and managing cognitive load.

Within our teaching, the introduction of EERs also challenged the stability of our pedagogical routines, often placing us in a state of uncertainty as we navigated roles that no longer fit neatly within the traditional teacher-led model. While gamified learning is often praised for its learner-centeredness (Stollhans, 2020), it also destabilizes the conventional distribution of instructional control and requires a recalibration of teacher responsibilities before, during, and after implementation—something we found far more complex in practice than anticipated. Before the EER, we struggled with foundational questions of pedagogical timing and sequencing. Unlike traditional lessons, where content delivery and task progression are clearly scaffolded, the open-ended and exploratory nature of EERs raised concerns: *Had students acquired sufficient linguistic readiness to engage productively? Despite the EER following direct instruction and yielding observable linguistic benefits, were we still introducing it too early—before students had fully consolidated their knowledge—or too late, when its potential to foster deeper understanding might have already diminished?* These decisions could not be resolved through technical preparation alone; they require critical professional judgment and a deep understanding of learner variability—something not always afforded within rigid curricular structures.

During the EER, our roles were further destabilized. While students were actively engaged, we often found ourselves relegated to the margins of the activity, unsure of when and how to intervene. The shift from instructor to passive observer risked turning the teacher into a mere troubleshooter rather than a strategic facilitator of learning. At times, we asked ourselves: *Should we step in to guide students through difficulties, or let them struggle to preserve the integrity of the game-based challenge?* Although the EER incorporated instant feedback that went beyond simply marking answers right or wrong—by providing explanations and grammatical rules—the self-paced, screen-mediated format (Bellés-Calvera & Martínez-Hernández, 2022) still limited opportunities for spontaneous teacher-student interaction. Unlike conventional classroom talk, which allows for dynamic questioning, clarification, and real-time scaffolding, the digital structure may obscure students' reasoning processes, making it harder to detect partial understanding or misconceptions not evident from final answers. After the activity, the lack of structured space for teacher-student interaction further complicated our efforts to consolidate learning. While data from student responses were available, they offered limited insight into how or why certain errors occurred—particularly when answers were corrected after trial and error rather than reflection (Damaševičius & Sidekerskienė, 2025). This raised deeper questions: *Did completion signify*

understanding, or merely perseverance? Was engagement masking superficial learning? Without deliberate post-task reflection and structured discussion, the pedagogical impact of EERs risks being reduced to affective engagement rather than linguistic gain.

Lessons Learned

While the benefits of EERs are promising, the aforementioned tensions prompt a reconsideration of the widespread narrative in FL education that EERs, or gamified learning more broadly, are inherently empowering or transformative. In practice, they demand high levels of teacher agency, pedagogical reflexivity, and design literacy—resources that are often assumed but rarely supported. The absence of formal training or design expertise may suggest that much of our work is improvised, intuitive, and at times unsustainable. As such, while EERs can offer exciting potential, they also expose gaps in how language pedagogy accommodates digital game-based approaches. The challenges we faced were not simply technical but epistemological—raising questions about what counts as teaching, how learning is made visible, and what forms of professional knowledge are necessary to enact such innovations meaningfully. Going forward, several practical takeaways emerged from our experience:

A well-crafted EER is only part of the equation. While designing coherent narratives, engaging puzzles, and effective feedback loops is essential, these elements must also align with the broader learning goals, game-for-learning mechanics, and the specific classroom dynamics in which the activity unfolds. Within this context, the role of the teacher can shift—often from active facilitator to passive observer. Rather than viewing this as a limitation, we argue for a rethinking of teacher involvement in EERs: not merely as game managers, but as designers of reflection, orchestrators of feedback, and co-constructors of meaning throughout the learning process.

Designing for engagement must not come at the cost of insight. While EERs can effectively capture attention, engagement alone does not guarantee meaningful learning. Without structured opportunities for students to articulate not just what they did, but what they learned and how—and for teachers to investigate what has been understood and what remains unclear—gamified activities risk becoming affectively memorable but pedagogically shallow. As such, teachers should consider weaving in reflective moments at multiple stages for students: before play, by priming metacognition through simple goal-setting tasks (e.g., predicting language forms or identifying target outcomes); during play, by sustaining metacognition through brief self-check prompts or embedded justification checkpoints; and after play, by consolidating metacognition through short written reflections or peer discussions focused on reinforced learning points, strategies used, and unresolved questions.

Reflection is most effective when it is reciprocal. While encouraging students to reflect is essential, reflection alone is insufficient without purposeful follow-up. Teachers should not only review student reflections—whether written, oral, or embedded in gameplay—but also respond with timely, targeted feedback to clarify misconceptions, reinforce effective strategies, and bridge learning gaps. Equally important, teachers should engage in their own reflective practice and use student reflections and classroom observations to evaluate the effectiveness of the EER design, adapt instructional strategies, and identify areas for pedagogical growth. By positioning reflection as a dynamic exchange—between students and teachers, and within teachers themselves—this process becomes a powerful tool for enhancing learning and informing instructional development.

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Appendix A. Design Script (Excerpt) of Conjugation Crisis in Café Paris

Opening Story

Narrative: It's a busy evening at Café Paris. The head chef is missing, the kitchen is in chaos, and a Michelin critic is arriving soon. Players must help restore order by completing five conjugation-based challenges to ensure the café retains its prestigious star.

Level 1: The Missing Recipe Book – Présent

Narrative: The head chef's recipe book has disappeared, and without it, the kitchen staff doesn't know how to prepare tonight's dishes. The waiters are pacing anxiously, and customers are starting to complain. You must find and reconstruct the missing recipes by filling in the correct *présent* tense conjugations before the dinner rush gets worse!

Sample Task: Conjugate three given verbs (*chercher*, *avoir*, *préparer*) correctly in the present tense within 25 seconds: *Le sous-chef _____ (chercher) désespérément les instructions, les serveurs _____ (avoir) du mal à rester calmes, et les commis _____ (préparer) les plats comme ils peuvent.*

Feedback Example:

- Correct: "Great job! 'Cherche', 'ont', and 'préparent' are all correct forms in present tense. Simply put, to conjugate an *-er* verb, you drop the *-er* ending and add the appropriate ending based on the subject and tense. For example, in the present tense, you add *-e* (for *je*), *-es* (for *tu*), *-e* (for *il/elle/on*), *-ons* (for *nous*), *-ez* (for *vous*), or *-ent* (for *ils/elles*) to the stem. For irregular verbs such as *avoir*, however, the forms must be memorized, as they do not follow standard patterns."
- Incorrect: "Your answers seem to be incorrect. Simply put, to conjugate an *-er* verb, you drop the *-er* ending and add the appropriate ending based on the subject and tense. For example, in the present tense, you add *-e* (for *je*), *-es* (for *tu*), *-e* (for *il/elle/on*), *-ons* (for *nous*), *-ez* (for *vous*), or *-ent* (for *ils/elles*) to the stem. For irregular verbs such as *avoir*, however, the forms must be memorized, as they do not follow standard patterns. In the present tense, *avoir* becomes *j'ai*, *tu as*, *il/elle/on a*, *nous avons*, *vous avez*, and *ils/elles ont*. Please try again!"

Level 2: Future Menu Planning – Futur Proche

Narrative: With tonight's dinner service under control, a new challenge arises: The Michelin critic has just confirmed a surprise visit for next week! The café needs to prepare an exclusive menu, but the chef's assistant has forgotten to write out the future plans correctly. To ensure the critic is impressed, you must help complete the future menu using *futur simple*.

Sample Task: Reorder jumbled sentence parts (e.g., “le chef / va / créer / un nouveau plat / pour / le dîner”) into correct future tense syntax within 20 seconds.

Feedback Example:

- Correct: Excellent! *Le chef va créer un nouveau plat pour le dîner* is a perfect example of *futur proche*. You used *va* (from *aller*) followed by the infinitive *créer*, which together express what the chef is going to do. This construction helps convey near-future actions clearly. Keep practicing this structure—you’ll use it often in everyday conversation!
- Incorrect: “Not quite! In *futur proche*, we use the present tense of the verb *aller* followed by an infinitive verb to express what someone is going to do. Double-check that *va* (the third-person singular form of *aller*) comes immediately before the infinitive verb. Also make sure the subject comes at the start of the sentence, and that all other sentence elements follow in a logical, grammatically appropriate order.

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