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Building learner autonomy through gamified vocabulary review with Gimkit

Alexander Cameron

Fukuoka University, Japan
cameron@fukuoka-u.ac.jp

This paper reports on a classroom project integrating Gimkit, a competitive online quiz platform, as a short weekly vocabulary-review routine in university Test of English for International Communication (TOEIC) preparation classes. The activity aimed to increase student engagement, promote autonomy, and support long-term retention through game-based repetition. Over multiple semesters, approximately 200 students participated in a brief weekly digital review cycle that required them to complete a short Gimkit activity each week. Class discussions and post-course reflections indicated that students valued the combination of autonomy, enjoyment, and visible progress. They reported stronger motivation to review vocabulary independently and greater confidence in listening and reading tasks. The paper argues that structured, low-stakes gamified routines can complement test-oriented curricula while fostering learner control and sustained engagement. Implications are offered for teachers wishing to integrate micro-scale computer-assisted language learning (CALL) tasks into regular coursework.

Keywords: gamification, Gimkit, learner autonomy, TOEIC, CALL

Introduction

Digital gamification has become an established strand of computer-assisted language learning (CALL), reflecting a broader shift toward gameful language teaching (Reinhardt, 2019). Platforms such as Kahoot!, Quizlet, and Gimkit combine repetition and feedback with the enjoyment of gameplay, encouraging students to practice vocabulary and grammar more willingly. When designed appropriately, game-based learning can support self-determination by addressing learners' basic psychological needs for competence, relatedness, and autonomy, as described in self-determination theory (Deci & Ryan, 2000). Within this framework, Gimkit activities can enhance students' sense of competence through immediate feedback and visible progress indicators, while the shared experience of gameplay – even when completed individually – can foster relatedness through classroom discussions and

peer comparisons of strategies and scores. While gamified tools are now common in English instruction, most studies report their use as short-term supplementary activities rather than systematic, semester-long routines (Wang & Tahir, 2020). This paper describes a recurring semester-long implementation of Gimkit in TOEIC preparation classes at a Japanese university. The goal was to explore how a short, repeatable weekly digital game could strengthen vocabulary retention and promote learner autonomy through consistent, self-directed practice.

Background and rationale

Learner autonomy in CALL is often linked to opportunities for self-regulation and decision-making (Benson, 2011; Reinders & White, 2016). Gamified environments offer these opportunities by allowing learners to engage at their own pace and to receive immediate feedback. Previous studies show that competitive quiz formats can enhance motivation and retention when learners perceive activities as meaningful (Dörnyei, 2015; Reeve, 2012). Gimkit (Gimkit, 2024) differs from earlier tools by combining quiz-based repetition with arcade-style gameplay: students earn energy for correct answers, reinvest it for upgrades, and monitor progress in real time. These mechanics encourage replay and goal-setting beyond the classroom. For TOEIC courses – typically centered on textbook-based practice – such routines can re-energize review and nurture self-initiated learning. In the current digital teaching landscape, maintaining learner motivation through short, meaningful online routines has become increasingly important (see Reinders & White, 2016). Students today are accustomed to mobile learning and gamified media yet still require guidance to channel these habits productively. Embedding digital review tasks within existing curricula offers a bridge between informal digital play and structured language learning. By positioning Gimkit as both a motivational and metacognitive scaffold, this project demonstrates how simple, repeatable CALL practices can enhance consistency and autonomy within test-oriented environments. The project therefore asked:

1. How can short, gamified review routines foster learner autonomy in TOEIC vocabulary study?
2. What benefits and challenges emerge from weekly use of Gimkit as a digital vocabulary review activity?

Methodology

Procedure

Target vocabulary was introduced during regular class time through a combination of methods. Students worked with a TOEIC preparation textbook containing core vocabulary, and approximately 25–30 minutes of each class session was devoted to vocabulary activities drawing from the TOEIC Service List (TSL), which comprises approximately 1,200 words specific to the TOEIC examination (Browne & Culligan, 2016). In-class activities included reading single words and words embedded in context sentences, as well as listening to isolated vocabulary items and words within

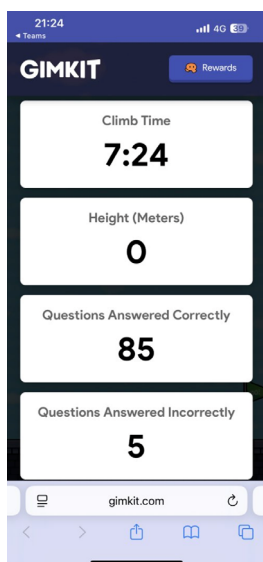
sentence frames. To promote engagement, the instructor used gamified quiz platforms such as Kahoot!, Blooket, and Quizlet for team-based competition activities. The weekly Gimkit assignments then functioned as solo homework, allowing students to review the week's vocabulary at their own pace without the competitive pressure of in-class activities, with the option to replay as many times as needed for mastery.

Participants and context

The project took place across six sections of an elective English for Specific Purposes (ESP) course at a private Japanese university, with approximately 200 students participating in total. This course focused on TOEIC preparation, emphasizing the four language skills with particular attention to reading and listening comprehension, multiple-choice question strategies, test-taking strategies, and core vocabulary development. Students were first- and second-year non-English majors with TOEIC scores ranging approximately from 350 to 650. The 15-week semester included once-weekly 90-minute class meetings, with Gimkit vocabulary activities integrated during 10 of these weeks (the remaining weeks were devoted to orientation, midterm assessments, and final examinations).

Materials and tools

Weekly Gimkit quizzes were created using items drawn from the TOEIC Service List (Browne & Culligan, 2016). Each quiz contained 100 words, and students completed these as asynchronous practice in a variety of Gimkit modes (including Fishtopia, Don't Look Down, and Farmchain). The quizzes were accessed via smartphone or personal computer through shared class links. Figure 1 shows the Gimkit interface that students interacted with during these activities.



Note. The screen displays the game timer (7:24), gameplay progress (Height: 0 meters, indicating the student chose to skip the game mechanics), Questions Answered Correctly (85, the target goal), and Questions Answered Incorrectly (5), demonstrating the platform's immediate feedback and progress tracking features.

Figure 1. Student completion screen showing the Gimkit interface after completing a weekly vocabulary review activity

Results and discussion

Participation and engagement

Across the semester, students worked through ten weekly Gimkit vocabulary sets and several review quizzes that recycled earlier content. Most students completed the weekly activities consistently, with many replaying quizzes multiple times. Typical student reflections included the following:

More fun than usual homework.

I liked choosing when and how to play.

Because it repeats the questions I get wrong, I can remember better.

I liked doing it on my phone at home, anytime.

Completion rates remained consistently high throughout the semester, with nearly all students (approximately 95–100% each week) submitting their Gimkit assignments, with flexible deadline extensions granted in cases of illness, family events, or extreme weather. Gimkit's analytics dashboard showed that students typically answered 100–120 questions to achieve the target of 85 correct answers, reflecting accuracy rates of approximately 70–85%. The platform's built-in repetition feature – which re-presented incorrectly answered items – appeared to support this learning process, as students could immediately correct errors and reinforce their understanding. Most activities were completed in 10–15 minutes, though some students voluntarily replayed their sessions multiple times, occasionally extending well beyond the minimum requirement.

The competitive structure appealed to learners who valued feedback and visible progress, and several noted that they continued playing until achieving their target score. These patterns reflect the autonomy and competence needs described in self-determination theory (Reeve, 2012).

Perceived learning benefits

Students reported improved familiarity with TOEIC vocabulary and greater confidence when encountering known words during practice tests. Several commented that repetition made difficult items easier to remember and helped them feel more confident before tests. Several students commented that while the word lists initially felt challenging, the weekly reviews helped them remember more over time. The combination of predictable weekly rhythm and playful repetition reduced cognitive load and helped students internalize a study routine. As Dörnyei (2015) notes, small, achievable learning goals promote sustained motivation across a semester.

Autonomy and responsibility

A major benefit was the perception of choice. Students could attempt quizzes anytime, replay freely, and track their progress. This flexibility supported a sense of ownership over learning pace and intensity. These behaviors reflect autonomy-supportive

learning environments (Deci & Ryan, 2000), where students experience control and volition rather than external pressure. Reeve (2012) emphasizes that such contexts help learners internalize goals and persist without external incentives. In this project, playful competition appeared to transform routine review into self-directed engagement, allowing students to experience both competence and freedom. From the teacher's perspective, minimal supervision was required after setup. The platform reduced marking workload while providing consistent insight into participation trends. A few students had connection or device problems, which, as Reinders and White (2016) note, are common issues to plan for in online learning.

Challenges and limitations

A number of students first perceived the weekly deadlines as challenging, but as the semester progressed, they established a rhythm and found the tasks manageable. Over time, the routine became a regular and sustainable part of their study habits. Given the short duration and non-experimental nature of the project, results are exploratory. Nevertheless, patterns suggest that even brief, consistent gamified routines can reinforce vocabulary learning and encourage autonomous study behaviors.

Conclusion

Integrating Gimkit as a brief weekly routine demonstrated that short, structured gamified tasks can strengthen learner autonomy and engagement in TOEIC preparation. Students responded positively to the combination of enjoyment, repetition, and visible progress. For the instructor, Gimkit offered a low-maintenance CALL tool for vocabulary review that complemented, rather than disrupted, existing curricula. Beyond TOEIC-oriented courses, this approach could be adapted for general English communication, ESP, or reading classes requiring ongoing vocabulary exposure. Because Gimkit allows teachers to import or create topic-specific lists, it can support both intensive and extensive learning goals. Its flexibility for asynchronous, low-pressure participation offers a practical way to foster learner autonomy across a range of proficiency levels and teaching contexts.

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Author biodata

Alexander Cameron is a lecturer at Fukuoka University's General Education Center. His research interests include learner autonomy, gamification, and vocabulary development in EFL contexts. He has taught English and coordinated CALL-based instruction in Japan for two decades.