



Fostering engagement and autonomy in blended foreign language learning for adult learners in Higher Education

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Abstract

This paper investigates strategies for enhancing engagement, intrinsic motivation, and learner autonomy in blended foreign language learning for adult students in higher education. Drawing on adult learning theories, it underscores the importance of self-directed learning, active participation, and flexible environments that accommodate learners balancing academic, professional, and personal responsibilities. The study presents a case from the University of the Peloponnese (in Greece) involving undergraduates students enrolled in the course “French for Social and Political Scientists.” During exam preparation, supplementary materials were provided via the eClass platform, enriched with gamified and interactive tools such as Wordwall, Quizlet, and Kahoot. These applications offered self-paced practice, immediate feedback, and opportunities for both individual and collaborative learning, fostering engagement while reducing learner anxiety. Students reported improvements in vocabulary, reading and listening comprehension, pronunciation, and digital skills. Quantitative results showed a 23% increase in average exam scores among participants using these tools. Qualitative feedback highlighted enhanced motivation, stronger community bonds, and sustained autonomous learning beyond the course’s completion. The findings suggest that integrating well-designed digital interventions within blended environments transforms exam preparation into a dynamic, personalized, and socially connected experience. This approach not only supports language acquisition but also cultivates essential skills for lifelong learning, offering a replicable model for diverse higher education contexts.

Keywords: blended learning, digital tools, engagement, gamification, learner autonomy

1. Introduction

In recent years, blended learning has gained increasing prominence as a dynamic pedagogical approach in higher education, combining the flexibility of online instruction with the structure and immediacy of face-to-face interaction. This shift has been further accelerated by the digital transformations following the COVID-19 pandemic, which underscored the need for resilient and adaptable teaching models across disciplines (Bozkurt et al., 2020). For adult learners in particular—who frequently balance professional, personal, and academic responsibilities—such environments offer the possibility of both autonomy and engagement when carefully designed. At the same time, they respond to broader educational priorities, including the European Commission’s call for digital competence as a fundamental pillar of lifelong learning (European Commission, 2019).

Engagement, defined as the emotional and cognitive investment in the learning process, has been consistently associated with intrinsic motivation and the achievement of deep learning outcomes (Zepke & Leach, 2010; Deci & Ryan, 2000). Learner autonomy, on the other hand, emphasizes the ability of students to direct their own learning, set goals, and reflect critically on progress (Little, 1991; Benson, 2011). These dimensions are central to adult learning theories, including Knowles’ andragogical model, which positions adults as self-directed and experience-rich learners (Knowles et al., 2015). Theories of motivation, such as Self-Determination Theory (Deci & Ryan, 2000) and Flow Theory (Csikszentmihalyi, 1990), further suggest that environments that foster autonomy, competence, and relatedness are most effective in sustaining learner effort and persistence.

Within blended contexts, digital tools and strategies such as gamification, formative assessment, and collaborative online learning have emerged as particularly powerful. Gamification—defined as the application of game elements such as points, levels, and immediate feedback in non-game contexts—can transform routine academic tasks into stimulating challenges that encourage persistence and enjoyment (Gee, 2007; Deterding et al., 2011). Equally important are formative assessment tools, which provide opportunities for self-assessment, reflection, and immediate feedback, helping learners reduce performance anxiety while promoting self-regulation (Dörnyei, 2001). From a socio-constructivist perspective (Vygotsky, 1978), collaborative learning in online environments further supports knowledge co-construction, dialogue, and peer feedback, reinforcing the social dimension of learning.

Foreign language education, with its emphasis on skill integration, practice, and feedback, provides fertile ground for such innovations. Gamified applications such as Wordwall, Quizlet, and Kahoot have been shown to support vocabulary acquisition, listening comprehension, and pronunciation, while simultaneously enhancing motivation and learner satisfaction (Çil, 2021; Do & Huynh, 2024; Ibad et al., 2023). By embedding these tools into blended environments, educators can move beyond content delivery to cultivate learner autonomy, digital literacy, and lifelong learning competencies.

Within this context, the present study investigates the integration of gamified digital tools in a blended French language course for undergraduate students at the University of the Peloponnese. Specifically, it examines how these interventions impacted linguistic performance, learner engagement, and psychosocial well-being. By highlighting both measurable academic gains and the development of transferable competencies such as self-regulation and community building, the study demonstrates the potential of thoughtfully designed digital practices to contribute to a more holistic and enduring learning process in higher education.

2. Engagement, motivation and autonomy in blended adult learning

Engagement, motivation, and learner autonomy are key concepts in adult education, particularly in the context of blended learning. Adult learners, who often have to balance work, family, and study responsibilities simultaneously, require learning environments that stimulate their interest, encourage active participation, and empower them to take ownership of their progress (Brookfield, 1986; Knowles et al., 2015). Blended approaches are particularly suitable for this group, as they combine flexibility with structure and create opportunities for both guided instruction and independent exploration (Garrison & Vaughan, 2008). In higher education, these dimensions are increasingly framed within the broader paradigm of lifelong learning and digital literacy, competencies considered essential for academic and professional development in the 21st century (European Commission, 2019; Redecker, 2017).

2.1 Learner engagement and motivation

Engagement refers to learners' emotional, cognitive, and behavioral investment in the learning process, which is essential for achieving deep and meaningful learning (Zepke & Leach, 2010). It is closely linked to motivation, particularly intrinsic motivation, which is driven by personal interest and satisfaction (Deci & Ryan, 2000). Theories such as Self-Determination Theory (Deci & Ryan, 2000) highlight that when learners experience autonomy, competence, and relatedness, they are more likely to persist and thrive. Similarly, Flow Theory (Csikszentmihalyi, 1990) emphasizes the importance of challenge-skill balance and immediate feedback in sustaining attention and enjoyment. For adult learners, who often face competing demands, sustaining motivation is both challenging and critical (Brookfield, 1986). Recent research has further shown that gamification, when thoughtfully embedded in blended environments, enhances engagement and persistence by offering dynamic and interactive learning experiences (Zainuddin et al., 2024).

2.2 Learner autonomy in Adult Education

Learner autonomy is another cornerstone of effective adult learning. It encompasses the ability to self-direct one's learning—setting goals, making decisions, reflecting, and adapting learning strategies (Reinders & White, 2016; Little, 1991; Benson, 2011). This principle aligns with Knowles' (1984) andragogical model, which frames adults as lifelong learners who exercise autonomy and capitalize on their rich experiential backgrounds. In this sense, autonomy is not only an individual competence but also a developmental process, cultivated through carefully scaffolded opportunities for reflection, self-assessment, and decision-making. Blended learning environments can effectively strengthen autonomy, as they allow learners to manage their pace, revisit resources, and engage in both synchronous and asynchronous forms of interaction (Garrison & Vaughan, 2008). Moreover, gamification in higher education has been shown to support autonomy by shifting learners from passive recipients to active participants in their own progress (Dichev & Dicheva, 2017; Kostas et al., 2025).

2.3 Blended learning as a pedagogical space

Blended learning environments provide fertile ground to enhance these dimensions by combining flexibility with structure. When effectively designed, they promote personalization, real-time and asynchronous interaction, and collaborative knowledge building (Garrison & Vaughan, 2008; Hrastinski, 2019). Research suggests that blended models can bridge the gap between teacher guidance and learner independence, encouraging both accountability and self-regulation (Means et al., 2013).

2.4 Gamification and formative assessment

Among the strategies that enhance motivation and participation, gamification has emerged as particularly effective. By incorporating game-like elements such as points, levels, and real-time feedback, gamified learning transforms routine tasks into stimulating experiences that promote persistence and a sense of achievement (Gee, 2007; Deterding et al., 2011). Systematic reviews of gamification confirm that such strategies improve engagement and motivation but stress that their impact depends on the thoughtful design of the activities and alignment with learning objectives (Dichev & Dicheva, 2017; Zainuddin et al., 2024). Formative assessment tools, such as interactive quizzes, polls, and low-stakes practice activities, help learners monitor their understanding, adjust learning strategies, and reduce performance anxiety without the fear of failure (Dörnyei, 2001). These tools align with the development of self-regulated learning by encouraging reflection and providing immediate, individualized feedback.

2.5 Collaborative online learning

Finally, collaborative online learning—through discussion forums, group projects, and peer feedback—plays a critical role in cultivating a sense of community, shared purpose, and mutual support. This resonates strongly with adult learners' preference for dialogue, relevance, and real-world connection (Garrison & Vaughan, 2008; Vygotsky, 1978). Additionally, studies highlight that gamified and blended environments can reduce learner anxiety, strengthen community bonds, and enhance digital skills (Brookfield, 1986; González Mora & Toledo, 2014). Such psychosocial and digital competencies are increasingly recognized as essential complements to academic achievement in higher education.

In summary, blended learning serves as a fertile pedagogical ground where thoughtfully implemented digital strategies—gamification, formative assessment, and collaboration—can significantly enhance adult learners' engagement, intrinsic motivation, and autonomy, while also cultivating digital competence and lifelong learning skills (Kostas et al., 2025).

3. Approach to the undergraduate teaching of French as a foreign language in Higher Education

The study was conducted with a cohort of 88 undergraduate students enrolled in the course *French for Social and Political Scientists* during the Spring semester of the academic year 2024–2025 at the University of the Peloponnese in Greece. For the purposes of the present analysis, inclusion criteria required students to (a) attend the majority of face-to-face and online sessions, (b) actively participate in the blended learning activities, and (c) complete the final examination. Based on these criteria, 60 students were included in the sample, while those with irregular attendance or incomplete assessment data were excluded. This approach ensured that the findings were grounded in reliable and comparable data, allowing for a more valid evaluation of learning outcomes. The course itself was delivered in a blended format, combining face-to-face instruction with online activities supported by the university's eClass platform, a digital learning environment widely used in Greek higher education.

To prepare students for their final examinations, supplementary materials were uploaded onto the eClass platform. These included reading comprehension texts, vocabulary and grammar exercises, all aligned with the semester's content. To enrich the revision process and sustain motivation, the intervention integrated gamified digital applications such as Wordwall, Quizlet, and Kahoot. These tools were selected because they provide interactive, low-stakes practice, instant feedback, and opportunities for both individual and collaborative learning.

In the field of foreign language education, gamified applications such as Wordwall, Quizlet, and Kahoot have proven to be highly effective in supporting vocabulary development, listening

comprehension, and pronunciation skills. Recent empirical studies highlight the value of Wordwall in promoting retention and oral accuracy (Çil, 2021; Do & Huynh, 2024), while comparative research demonstrates that tools like Kahoot and Quizizz foster collaborative competition, enjoyment, and sustained learner engagement (Ibad et al., 2023). Quizlet, in particular, has been shown to enhance self-paced learning and long-term vocabulary retention through digital flashcards and spaced repetition (Dizon, 2016; Dizon & Tang, 2017). More recent investigations confirm that gamification strategies significantly improve vocabulary acquisition, motivation, and learner autonomy in both school and higher education contexts (Ummi, 2025; Cheng et al., 2025; Bohyon & Noble, 2025; Calle Urgilez et al., 2024). Collectively, these findings underscore the pedagogical relevance of integrating such user-friendly, widely accessible tools into language learning environments. Their role is especially significant in exam preparation and autonomous study, where immediate feedback and interactive design contribute to more meaningful and motivating learning experiences.

Guided by these insights, the study integrated gamified tools into the course to observe their impact in practice. For example, Kahoot's *Team Mode* allowed groups to compete in real time, fostering collaboration and motivation, while Wordwall enabled learners to hear vocabulary pronounced by native speakers, supporting both listening comprehension and pronunciation skills. Quizlet further facilitated spaced repetition and personalized study pathways, enabling students to monitor their progress and revisit challenging areas at their own pace.

The effectiveness of these practices was evaluated through two complementary sources of data: the students' performance in the final exam and a post-course survey completed by participants who actively used the digital tools. This mixed-method approach provided both quantitative and qualitative evidence on the impact of the intervention.

4. Findings

The analysis demonstrated a 23% increase in average exam scores among students who engaged with the supplementary activities and digital tools, compared to their performance in exercises and assignments during the semester—an indication of substantial learning progress and the effectiveness of the intervention in consolidating knowledge. Such improvement resonates with previous findings that gamification and digital practice activities can significantly reinforce retention and deepen understanding (Gee, 2007; Dörnyei, 2001). This suggests that the combination of structured revision materials with interactive applications created a more stimulating and efficient preparation process, helping students transfer skills developed throughout the course into improved final performance.

Beyond exam outcomes, students reported enhanced competence in reading and listening comprehension, vocabulary acquisition, and spoken accuracy. In particular, the pronunciation support offered by Wordwall was highly valued, with many students emphasizing its role in natural and engaging language development. The ability to listen to words spoken by native speakers and repeat them autonomously allowed learners to refine their oral accuracy, an aspect that is often underdeveloped in traditional university language courses. Similar findings in the literature highlight that repeated exposure combined with authentic auditory input can foster confidence in pronunciation and listening skills (Çil, 2021; Reinders & White, 2016).

Another significant outcome was the sustained engagement of learners, many of whom continued practicing and interacting with the French language autonomously even after formal classes had ended. This illustrates the development of learner autonomy, self-regulation, and self-assessment, as students revisited materials at their own pace, monitored their progress, and set their own goals. Such behavior reflects Knowles' (1984) andragogical model, which positions adult learners as self-directed, experience-rich, and intrinsically motivated. It also

aligns with Zepke and Leach's (2010) assertion that engagement and motivation are inseparable dimensions of effective adult learning, particularly in flexible learning environments such as blended higher education.

The post-course survey further revealed that these digital tools contributed to managing pre-exam anxiety, a common barrier to performance in assessment contexts. Learners reported that the gamified format and the possibility of repeated practice in a low-stakes environment reduced stress and created a sense of psychological safety. This echoes Brookfield's (1986) emphasis on the importance of addressing affective factors in adult learning and supports evidence that formative assessment can alleviate performance anxiety while fostering persistence (Deci & Ryan, 2000). Moreover, the use of Kahoot in team mode promoted collaborative competition, encouraging students to experience learning as a collective process. This created a sense of community in the virtual learning environment, resonating with Garrison and Vaughan's (2008) view that social presence is a critical dimension of effective blended learning. Many participants also highlighted an improvement in their digital skills, underscoring the additional transferable benefits of the intervention, as digital literacy is increasingly recognized as a core 21st-century competency (Redecker, 2017).

Taken together, these outcomes highlight a pedagogical shift from passive reception to active experimentation. Learners were not merely consuming content but actively engaging with it, reflecting on their performance, and making informed adjustments. They cultivated autonomy by taking control of their learning trajectory, revisiting materials independently, and engaging in self-assessment practices that reinforce lifelong learning competencies (Holec, 1981). The integration of gamification and formative assessment illustrates how thoughtfully designed digital activities can transform exam preparation from a passive review task into a dynamic, personalized, and socially meaningful experience. Ultimately, the findings confirm that digital interventions in blended higher education not only enhance academic performance but also foster autonomy, well-being, and transferable skills that extend beyond the classroom.

5. Discussion

The findings of this study confirm and extend existing scholarship on the role of gamification and digital interventions in blended higher education. By integrating tools such as Kahoot, Wordwall, and Quizlet, the course not only improved immediate academic performance but also fostered learner autonomy, engagement, and psychosocial well-being. These outcomes resonate strongly with adult learning theory, particularly Knowles' (1984) andragogy, which views adult learners as autonomous, self-directed, and motivated by relevance and practical application.

A key insight lies in the shift from passive review to active experimentation. Consistent with Gee's (2007) and Deterding et al.'s (2011) work on gamification, the incorporation of interactive challenges and real-time feedback redefined exam preparation as a stimulating and risk-free process. Rather than focusing exclusively on memorization, students engaged in exploration, collaboration, and reflection. The motivational dynamics observed align closely with Deci and Ryan's (2000) Self-Determination Theory: the digital tools provided a sense of autonomy (students chose when and how to practice), competence (instant feedback supported skill mastery), and relatedness (team-based modes strengthened peer interaction). Together, these elements fostered intrinsic motivation and sustained participation.

Beyond immediate skill gains, the results underscore the broader psychosocial dimension of learning. Students reported reduced pre-exam anxiety and a stronger sense of community, outcomes that echo the importance of emotional engagement in Zepke and Leach's (2010) model of student success. This is particularly relevant in the context of adult learners, many of

whom juggle competing professional and personal demands. By alleviating feelings of isolation and cultivating a supportive learning environment, digital tools reinforced Brookfield's (1986) argument that adult learning must also address affective and social needs.

The development of learner autonomy is another crucial outcome. Students who continued practicing French independently after the course exemplify Benson's (2011) and Little's (1991) conceptualizations of autonomy as a process of self-direction and reflective practice. Blended environments, as argued by Garrison and Vaughan (2008), provide the ideal pedagogical space to nurture such autonomy by combining flexible digital tools with structured support. In this study, gamification and formative assessment were not ends in themselves but catalysts for deeper self-regulated learning.

Another important dimension concerns digital literacy. The use of applications such as Quizlet and Kahoot exposed students to transferable technological skills that extend beyond language learning. This outcome aligns with the European Commission's (2019) and Redecker's (2017) emphasis on digital competence as a cornerstone of lifelong learning. By developing familiarity with digital platforms and cultivating habits of autonomous online practice, students gained skills applicable to academic, professional, and personal contexts.

However, the results also raise critical questions about sustainability. Several students noted in post-course feedback that the novelty of the tools might diminish over time, echoing Csikszentmihalyi's (1990) Flow Theory, which highlights the need to maintain an optimal balance between challenge and skill. This suggests that future iterations of blended language courses must adapt and diversify digital interventions to sustain engagement across longer periods. Additionally, as Hrastinski (2019) argues, blended learning should not be reduced to a technical solution but should be continuously aligned with pedagogical objectives and learner needs.

Taken together, these findings contribute to a growing body of evidence that gamified blended learning can serve as a powerful pedagogical approach in higher education, provided it is thoughtfully and adaptively integrated. The study demonstrates that such interventions are not only effective in enhancing academic outcomes but also in addressing the psychosocial and developmental needs of learners, fostering resilience, autonomy, and motivation in adult education contexts.

6. Conclusion

This study demonstrates how gamified digital tools can enrich blended language learning in Higher Education. By incorporating applications such as Wordwall, Quizlet, and Kahoot into the revision process, exam preparation was redefined as an interactive, learner-centered, and less anxiety-inducing experience. Beyond measurable improvements in performance, the intervention fostered learner autonomy, engagement, and digital competence underscoring the broader educational value of such practices.

Looking forward, the findings suggest that the integration of gamification and formative assessment within blended environments can support not only language development but also transferable skills essential for lifelong learning. Future research should explore the sustainability of these gains over time and their adaptability across disciplines and contexts. Ultimately, the study affirms that thoughtfully designed digital interventions can play a transformative role in aligning academic demands with the needs and well-being of adult learners.

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