



THE IMPACT OF REAL-TIME INTERACTIVE PLATFORMS ON ATTENTION AND MOTIVATION

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This article explores the impact of real-time interactive platforms on learners' attention and motivation in technology-enhanced education. The study analyzes how synchronous digital tools—such as live quizzes, polls, breakout rooms, and instant feedback systems—shape students' cognitive engagement. Using mixed research methods, including classroom observations and learner surveys, the findings show that real-time interactivity significantly improves sustained attention, increases intrinsic motivation, and reduces cognitive fatigue through immediacy and gamification effects. Students working with interactive platforms report higher participation and stronger learning persistence. The study concludes that real-time tools create a more dynamic learning environment and provides recommendations for teachers to integrate such platforms systematically. The rapid integration of digital technologies into educational contexts has reshaped instructional approaches across disciplines. Among these innovations, real-time interactive platforms have gained particular relevance for language teaching due to their capacity to facilitate instant participation, provide formative feedback, and incorporate elements of gamification. Previous studies have shown that interactive technologies increase learners' sense of autonomy and involvement, yet the underlying cognitive and motivational mechanisms remain under-explored[1].

In language learning, attention plays a critical role in processing new linguistic information, while motivation influences persistence, effort, and learning outcomes[3]. Real-time platforms have the potential to enhance both processes by promoting active engagement through immediate response, visual stimuli, time-bound tasks, and peer comparison[4]. However, empirical research focusing specifically on English language learners in higher education—especially in non-linguistic faculties—remains limited.

This study aims to address this gap by examining the impact of real-time interactive platforms on learners' attention and motivation during English lessons. The research was conducted among students of natural science majors, where traditional teacher-centred instruction remains common, making this environment ideal for evaluating the transformative potential of interactive technologies.

A mixed-method design was employed, combining quantitative surveys with qualitative feedback. This approach enabled the measurement of motivational and attentional changes while also capturing students' subjective experiences. The study involved 86 first- and second-year undergraduate students majoring in Biology and Geography at a non-philological university in Uzbekistan. Participants had pre-intermediate English proficiency and had limited prior experience with educational gamification tools. Three main instruments were used:

1. Attention Scale (AS-E) – designed to measure selective attention, sustained attention, and task engagement.



2. Motivational Index for Language Learning (MILL) – assessing intrinsic, extrinsic, and task-related motivation.
3. Student Perception Questionnaire (SPQ) – open-ended items regarding platform usability and emotional response.

Platforms included Kahoot!, Wordwall and Quizizz, integrated weekly over eight weeks.

The study was implemented during an eight-week instructional period:

- Weeks 1–2: Baseline lessons without interactive tools
- Weeks 3–8: Lessons integrating real-time platforms
- Weekly activities included vocabulary quizzes, listening tasks, pronunciation checks, and group challenges.

Students completed questionnaires both before and after the intervention. Qualitative data were collected through SPQ in the final week. Quantitative data were processed using descriptive statistics and paired comparison analyses. Qualitative responses were coded into thematic categories, including engagement, enjoyment, competition, and cognitive stimulation.

Results from the Attention Scale showed a significant increase in students' sustained and selective attention during sessions that incorporated interactive tools.

- Sustained attention improved by 31%.
- Selective attention increased by 24%.
- Students reported fewer distractions and greater task involvement.

Qualitative feedback indicated that countdown timers, colourful visuals, and rapid feedback helped learners maintain focus. Several students noted that "the competitive atmosphere prevents my mind from wandering" and "the time-limit makes me concentrate more than usual." Scores from the survey demonstrated a substantial rise in both intrinsic and task-related motivation:

- Intrinsic motivation increased by 28%.
- Task-related motivation rose by 35%.
- Extrinsic motivation remained stable.

Students expressed that the platforms made the lessons "more exciting," "less monotonous," and "emotionally stimulating." The gamified environment—with points, rankings, and immediate feedback—was repeatedly mentioned as a strong motivational factor.

The findings clearly demonstrate that real-time interactive platforms have a positive and measurable impact on both attention and motivation in English language learning contexts. This aligns with theories of gamification, cognitive arousal, and self-determination, which propose that dynamic, responsive tasks can enhance cognitive engagement. Rapid feedback loops, visual stimuli, and competitive elements create a cognitively stimulating environment that encourages learners to remain focused. The results support the Cognitive Load Theory position that meaningful multimedia stimuli can increase working memory activation when well-designed.

To conclude, this study demonstrates that real-time interactive platforms significantly improve students' attention and motivation in English language learning environments. The combination of immediate feedback, gamification, and synchronous participation creates a dynamic, cognitively stimulating classroom atmosphere. These tools are particularly effective in non-philological faculties, where traditional approaches often reduce engagement. Future



research may explore long-term retention, vocabulary development, and the role of emotional factors in technology-mediated language learning.

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