"Afaqfikriya" Journal

P-P…-…

ISSN: 2170-0060

EISSN:2602-5507

Language Acquisition Through Gamification: Insights from Algerian Middle Schools

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Received: *18-03-2026* ***Accepted: 2026-04-18*** ***Published:***2026-05-19

Abstract :

Gamification is a promising instructional approach that enhances students' engagement and academic performance. This study examines its effectiveness in improving language acquisition among middle school students in Algeria.Rooted in current pedagogical principles, this research uses a multimethod approach, including semi-structured interviews and classroom observations, to explore how gamified elements—such as point systems, digital platforms, and class competitions—influence student motivation, engagement, and learning outcomes. The findings indicate that educators generally have a favourable view of gamification, acknowledging its role in boosting student participation, reducing anxiety, and improving vocabulary retention. However, significant obstacles to its consistent application persist, including a lack of adequate infrastructure, insufficient teacher training, and challenges with classroom management. The study concludes with recommendations for providing systemic support, focusing on improving access to digital resources, increasing teacher professional development, and better integrating these strategies into the curriculum. These insights highlight the necessity of institutional support to fully utilize the potential of gamification in language education.

Keywords: Academic performance, gamification, institutional support, language acquisition, middle schools.

Introduction Given the rapid evolution of technology and pedagogical approaches, educators are constantly seeking innovative methods to boost student engagement and academic performance. A particularly effective strategy that has gained prominence is gamification, which revitalizes conventional learning

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environments by making them more interactive, student-centric, and impactful. Gamification involves incorporating elements typically found in games,like points, badges, leaderboards, and narratives into non-game settings, especially education. The goal is to stimulate motivation, increase participation, and improve learning outcomes.

Gamification shows significant potential for language acquisition. Language learning is a dynamic process that depends on consistent practice, timely feedback, and meaningful interaction. Gamified instruction meets these requirements by creating engaging settings that can reduce anxiety, solidify vocabulary, and enhance fluency through purposeful, game-like activities. Its growing adoption by language educators, coupled with its strong psychological underpinnings including concepts like self-determination, flow, and self-efficacy has made it a focal point of scholarly inquiry globally.

While there's growing interest in gamificationfor education, its adoption in Algerian middle schools remains limited. Teachers across the country encounter significant obstacles, from insufficient access to technology and digital infrastructure to a lack of training in modern

Despite some educators successfully integrating gamified platforms like Kahoot or Duolingo, others are either unconvinced or uninformed about the potential benefits of this approach. This disparity highlights a need for more research to understand the perceptions, implementation, and overall reception of gamification within Algeria's unique educational landscape.

This study aims to address this knowledge gap by exploring the attitudes of Algerian middle school English as a Foreign Language (EFL) teachers.The research is guided by the following questions:

Research Questions

1. What are the perceptions of middle school EFL teachers toward integrating gamification into their classrooms?

2. What strategies can educators use to effectively encourage the use of gamification among middle school EFL learners?

Research Hypotheses

To answer these questions, the following hypotheses have been developed:

1-Middle school EFL teachers in Algeria are expected to have a positive outlook on incorporating gamification into their teaching, particularly during tutorial sessions.

2-Through increasing student engagement, enhancing vocabulary retention, and creating a supportive, low-anxiety learning environment, gamified teaching strategies contribute significantly to improving learners' motivation and overall language proficiency.

2.Review of literature

2.1Defining gamification

Coming up with a single, agreed-upon definition of gamificationhas been difficult because scholars have offered different interpretations that highlight various aspects of the concept.

One broad and widely cited definition, first coined by Nick Pelling, describes it as the use of game elements and techniques in a non-gaming environment. Similarly, Deterding et al. (2011) define it as "the use of game design elements in non-game contexts."

Other definitions emphasize the process and its purpose. For example, Zicherman and Cunningham (2011) describe it as "the process of game-thinking and game mechanics to engage users and solve problems." Besides, Kapp (2012) defines gamification as "using game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems."

2.2Gamification in Education

The integration of technology into education has made the gamification of learning possible, especially since 2010. During this period, new educational games were designed to meet the expectations of "Digital Natives"—a generation of learners with different needs and preferences than their predecessors. Researchers and educators have since developed various frameworks to guide the effective use of gamification. For instance,Huang and Soman (2013)proposed a five-step model for systematically integrating game elements, whileChou's(2015) Octalysis Frameworkprovides a motivational lens, identifying eight core drives like accomplishment and social influence that can be leveraged to enhance engagement.

3.3Dimensions of Gamification

According to Lee and Hammer (2011), gamification influences three key areas of learning: cognitive, emotional, and social.

•**Cognitive Dimension:** Gamification promotes active learning and curiosity by engaging students in game-based tasks. The design must align with a learner's skill level, gradually increasing in difficulty to maintain engagement and provide a suitable challenge. This approach fosters learner autonomy by allowing students to choose their own sub-goals, which in turn enhances motivation and ownership of the learning process. Immediate feedback is crucial, as it reinforces progress and leads to improved attitudes and a stronger commitment to educational goals.

•**Emotional Dimension:** Gamified learning environments are designed to evoke emotions like joy, curiosity, and enthusiasm. They also reframe failure as a normal and constructive part of the learning process. By repeatedly trying, learners overcome their fear of failure and become more resilient and optimistic. This emotional safety allows for exploration and growth.

When learners feel emotionally supported, they are more likely to take initiative, assess their abilities, and stay engaged in meaningful learning tasks.

Social Dimension

Gamification supports both collaborative and individual learning experiences. In collaborative settings, gamified tasks often require teamwork, role division, and shared responsibility toward toward achieving a common goal. This social interaction encourages peer learning and ensures the active involvement of all participants. Individually, gamification enables students to explore new roles and identities, particularly through customizable avatars or character representations. This is especially 11 Chapter 01 The Literature Review impactful for introverted learners who may struggle with direct social interaction. As Lee and Hammer (2011) note, these design features empower learners to explore their potential in a less intimidating, more creative space. Gamification, therefore, creates inclusive environments where all learners regardless of personality or learning style can engage, interact, and thrive. By encouraging participation, role experimentation, and collaborative problem-solving, it enriches the social fabric of the learning experience and fosters deeper motivation.

Gamification elements are essential in the design of learning experiences that use game-based principles to engage students. However, as Kapp (2012) explains, while these elements are important, they do not represent the entire purpose of a game. Rather, their role is to provide structure and support for the learning process. For example, assigning avatars can personalize learning and promote identity in the virtual learning environment. Ranking students based on their

scores or achievements can introduce healthy competition, while badges and trophies serve as extrinsic motivators. Lee and Hammer (2011) argue that the traditional educational system is already gamified in many ways. Grades function similarly to points; school projects can represent quests or challenges; and term-end rewards mirror game achievements. These elements also referred to as components are widely found in both digital and non-digital gamified learning environments. Common examples include points, badges, leaderboards, and progress tracking, all of which can be adapted to fit different classroom settings to enhance motivation and engagement (Ngoc, 2022).

3. Methodology

The study uses a multimethod qualitative research design, which involves combining two or more qualitative methods to gain a more complete understanding of a phenomenon. This is also known as triangulation, a term that refers to using multiple reference points to confirm a location. Here, it means using different methods and data sources to cross-validate findings, which enhances the credibility of the results. The key distinction from mixed-methods research is that this approach exclusively uses qualitative data.

3.1Data Collection Methods

The study employs two specific qualitative methods:

•**Semi-structured Interviews:** This method uses a set of pre-determined questions while allowing the interviewer to ask flexible follow-up questions. It's used to collect rich, in-depth qualitative data about participants' personal experiences, perspectives, and opinions, which helps researchers understand the "why" and "how" behind a phenomenon.

•**Observation:** This method involves systematically watching and recording behaviors in a natural setting. It's used to capture what people actually do, not just what they say they do, and can reveal subtle behaviors and social dynamics that might not be apparent in an interview.

The combination of interviews and observation allows for triangulation. Interviews provide insight into participants' subjective beliefs ("what" and "why"), while observation offers a direct, objective account of their behavior ("what is actually happening" and "how"). Comparing these two data sources helps researchers gain a more comprehensive and nuanced understanding of the research topic.

3.2Population and Sampling

The study's data came from a purposive sample of 10 current language teachers from Saida. This type of non-probability sampling is chosen because the goal is to explore contemporary pedagogical practices in a specific context, rather than to create a statistically representative sample of all teachers. The study aims to understand how gamification influences language learning, and the obstacles or enablers shaping its implementation. The insights gained from this sample will form the basis for final recommendations.

Purposeful sampling involves intentionally selecting participants who can provide the most relevant and "information-rich" data to answer your research questions. There are several types of purposeful sampling you can use:

To select the most appropriate participants for this study, a purposive sampling technique was employed. Purposive sampling is a non-probability sampling method that involves deliberately selecting individuals based on their ability to provide relevant and meaningful data aligned with the research objectives. In qualitative and mixed methods research, purposive sampling is particularly effective for case study designs, where the emphasis lies on depth rather than breadth of inquiry.

3.3Limitations of the Study

While the research methodology applied in this study was carefully designed to provide a comprehensive and nuanced understanding of the role of gamification in middle school language acquisition, it is important to acknowledge that no methodological framework is without its limitations. The small sample restricts the ability to statistically extrapolate results to the entire population of Algerian middle school teachers, especially given the vast diversity in educational contexts across the country. Moreover, the sample was selected purposively rather than randomly, meaning the findings are context-specific and may not fully capture the breadth of perspectives in different regions, school types, or socio-economic settings.

3.4Qualitative data analysis

Reflections on Gamified Experiences

Many teachers expressed rich and detailed reflections about their practical experiences using various gamification platforms and strategies within their classrooms. Popular tools such as Kahoot and Duolingo, as well as traditional classroom competitions like flashcard races, quiz bowls, and point-based team challenges, were frequently mentioned as integral to their teaching approach.

These narratives illustrate how gamification has influenced classroom dynamics and student learning behaviours

A common thread across many responses was the observation of significantly increased student engagement during gamified activities. Teachers noted that students, especially those who were previously shy, passive, or reluctant to participate, showed heightened enthusiasm and willingness to join in when lessons incorporated game elements. The competitive and interactive format of these games appeared to spark curiosity and motivation, making learning experiences more appealing and enjoyable for students.

Moreover, teachers frequently reported that gamification led to enhanced retention of vocabulary. Instead of perceiving vocabulary learning as monotonous or repetitive, students responded well to the playful repetition embedded in gamified tasks. The format allowed students to encounter and recall new words repeatedly within a fun and stimulating context. This approach made it easier for students to internalize language concepts, moving beyond rote memorization to more meaningful engagement with vocabulary.

Another significant insight from teachers was the reduction of anxiety among students, particularly during speaking or oral practice activities. Gamified methods appeared to create a low-pressure and supportive environment where students felt more comfortable taking risks and making mistakes. This positive emotional climate encouraged participation, which is especially important for language learners who often struggle with the fear of speaking in front of peers or instructors.

Several teachers emphasized that this reduction in anxiety was a crucial factor in enabling students to practice oral skills more freely and effectively, thereby accelerating their language development. For example, one teacher noted that students who typically remained silent during conventional drills became vocal and engaged during gamified activities, demonstrating a newfound confidence.

Reported Challenges

Despite the overall enthusiasm for gamification expressed by many teachers, several key challenges were consistently identified that impede the effective and widespread implementation of gamified learning activities within Algerian middle school language classrooms.

-Limited Resources and Technolog

A significant barrier reported by participants is the lack of adequate technological infrastructure and resources. Many schools, particularly those located in less urbanized or rural areas, face shortages of critical equipment such as computers, tablets, and interactive projectors. Additionally, unstable or absent internet connectivity severely limits the ability to utilize popular digital gamification platforms like Kahoot, Quizizz, or Duolingo. Teachers shared that even basic technological support is often unreliable or insufficient, restricting their capacity to incorporate gamified digital tools consistently.

-Lack of Training or Familiarity

Another major concern highlighted by participants was their own limited familiarity and confidence with designing, implementing, and managing gamified learning activities. Several teachers reported never having received formal professional development or training specifically focused on gamification methodologies or digital tools. This gap in preparation contributes to uncertainty and sometimes reluctance to adopt gamification beyond superficial or occasional use. The challenge is not only technical but pedagogical; teachers need support to align gamified activities effectively with curriculum goals and learning outcomes.

Classroom Management Difficulties:

Teachers who regularly use gamification also noted classroom management challenges, especially during competitive game sessions. The excitement and energy generated by games can lead to increased noise levels, off-task behavior, and difficulty maintaining order, particularly in larger classes or classrooms with diverse student behaviors. Managing enthusiasm without allowing disruption requires skillful facilitation, clear rules, and effective time management, which some teachers found challenging to maintain consistently.

Suggested Support

In response to the challenges identified, teachers articulated clear and specific needs for enhanced institutional and professional support to overcome obstacles and improve gamification integration.

Workshops on Gamification :

Teachers expressed a strong desire for practical, hands-on training workshops tailored to their specific teaching contexts. These workshops would ideally cover the design andimplementation of gamified lessons, effective use of popular digital tools, strategies for classroom management during game activities, and methods to align gamification with curriculum objectives.

Access to Digital Tools and Reliable Internet:

There was unanimous agreement on the necessity of equipping schools with appropriate hardware and stable internet connectivity. Participants emphasized that no amount of training would be fully effective without ensuring the basic technological infrastructure to support gamified learning.

Collaborative Communities of Practice :

Teachers advocated for the establishment of formal or informal collaborative networks where educators could share successful gamification strategies, lesson plans, troubleshoot challenges, and support one another. Such communities whether online forums, local teacher groups, or institutional networks could foster a culture of continuous learning and innovation. One teacher remarked:

"Workshops on digital tools would help me design better gamified lessons." over time.

Observational Insights

Classroom observations conducted alongside the interview data collection provided valuable, real-time insights into the dynamics of gamification in action.

Increased Student Participation :

Observations revealed that when teachers incorporated gamified activities, there was a noticeable rise in student participation. More students volunteered answers, engaged in group work, and demonstrated enthusiasm throughout the lessons.

Reinforcement of Vocabulary and Grammar:

Gamified tasks commonly served as review exercises to reinforce vocabulary and grammar. Teachers used flashcard games, quizzes, and competitive team challenges effectively to consolidate language skills.

Technical and Management Challenges :

Observers noted occasional technical difficulties, such as connectivity issues or equipment malfunctions, which interrupted the flow of lessons. Additionally, managing student behavior and time effectively during games was a recurrent challenge.

Positive StudentReactions:

Students were often seen smiling, cheering, and encouraging peers during gamified segments, indicating enjoyment and engagement. Some students explicitly requested that gamified lessons be repeated.

Varied Teacher Facilitation Styles:

Teachers demonstrated diverse approaches to integrating gamification, from structured game hosts carefully tracking scores to more casual uses of games as warm-up or review activities.

4.Discussion of Findings

The qualitative data gathered from teachers' responses, and classroom observations collectively portray gamification as a dynamic and highly effective pedagogical tool with substantial potential to enhance language learning outcomes in Algerian middle school classrooms. Teachers consistently reported that gamification transforms traditional instructional methods by increasing student engagement, fostering motivation, improving retention of vocabulary, and reducing learner anxiety, particularly during speaking and interactive activities. These narratives reveal that gamification creates more student-centred, interactive, and enjoyable learning environments, which are critical for sustaining student interest and promoting active language use.

At the same time, the qualitative findings expose several significant challenges and gaps that currently restrict the widespread and effective use of gamification. One of the most prominent barriers is the lack of adequate resources and technological infrastructure. Many schools, especially those situated in rural or under-resourced areas, face shortages of essential equipment such as computers, tablets, and projectors, alongside unstable or non-existent internet connectivity. These infrastructural deficiencies limit the practical feasibility of digital gamification platforms and constrain teachers' ability to regularly incorporate gamified elements into their lessons.

Another critical challenge is the insufficient training and professional development opportunities related to gamification. Many teachers expressed feelings of uncertainty or lack of confidence in designing and facilitating gamified activities due to limited exposure to these methods during their formal education or in-service training. This deficiency hampers their ability to leverage the full pedagogical benefits of gamification, leading to sporadic or conservative use of gamified strategies.

Furthermore, classroom management difficulties emerged as a recurring theme, with teachers reporting that the energy and excitement generated by game-based

learning activities sometimes lead to increased noise levels and off-task behavior. Effectively managing student behavior and maintaining lesson flow during gamified sessions requires specialized classroom management skills and well-established routines, which some teachers find challenging to maintain consistently.

Taken together, these insights from teachers' voices and direct classroom experiences underscore the tremendous potential of gamification to improve language acquisition and engagement but also highlight the urgent need for systemic and comprehensive support to overcome existing barriers. Addressing infrastructural limitations, enhancing teacher training with a focus on practical gamification strategies, and providing guidance on effective classroom management are essential steps toward ensuring gamification's successful integration and sustainability in Algerian middle schools.

Ultimately, the qualitative data advocate for a holistic and collaborative approach—one that includes investment in technological resources, capacity-building initiatives, institutional encouragement, and peer-support networks. Such an integrated framework will empower educators to harness gamification's full potential, fostering more engaging, motivating, and effective language learning experiences for students across diverse contexts.

Outlooks

Based on the comprehensive findings of this study, several key recommendations are proposed to enhance the effective integration of gamification in Algerian middle school language education. These recommendations address the core areas of training, infrastructure, policy, evaluation, and community support, aiming to create a sustainable and supportive environment for gamified language teaching.

1. Training and Capacity Building

Organize Regular Training Sessions on Gamified Language Teaching Methods: Ongoing professional development workshops and seminars should be established at district and school levels to equip teachers with practical skills in designing, implementing, and managing gamified activities. These sessions should provide hands-on experience with popular digital tools (e.g., Kahoot, Quizizz, Duolingo) and offer strategies for incorporating gamification into various language learning domains, such as vocabulary, grammar, and speaking practice.

2. Investment in Infrastructure

Equip Schools with Digital Tools and Internet Connectivity:

Adequate technological infrastructure is fundamental for successful gamification. This includes providing schools with sufficient computers, tablets, projectors, and reliable internet access. Investment in hardware and network infrastructure must prioritize equitable distribution to reduce disparities between urban and rural schools.

Provide Access to Software such as Quiz Platforms, Language Apps, and Multimedia Tools:

Schools should be supported in acquiring licenses and subscriptions for reputable gamified learning platforms and application. Access to a diverse range of software enables teachers to tailor gamified lessons to student needs and preferences, enhancing engagement and learning outcomes.

-Policy and Curriculum Development

Encourage National and Local Education Policies to Include Gamification as a Recommended Methodology:

Educational authorities should formally recognize gamification as an effective pedagogical approach within national and regional policy frameworks. Official endorsement can facilitate resource allocation, teacher training mandates, and the development of supportive guidelines.

-Integrate Gamified Tasks into the Curriculum Framework:

Curriculum developers should embed gamified learning objectives and tasks within language education standards. This integration ensures that gamification is not treated as an optional addon but as a core instructional strategy aligned with learning goals and assessment criteria.

Monitoring and Evaluation

Establish Systems to Track the Impact of Gamification on Student Performance: Comprehensive monitoring mechanisms should be developed to evaluate the effectiveness of gamified teaching methods. This includes collecting quantitative data on student achievement and engagement, as well as qualitative feedback from learners and educators.

Gather Ongoing Feedback from Teachers to Adjust Strategies:

Creating formal channels for teachers to share their experiences, challenges, and suggestions allows continuous refinement of gamification practices. Responsive

adjustments based on teacher input can improve implementation fidelity and sustainability.

Support Communities

Developing vibrant communities of practice enables educators to exchange lesson plans digital, and innovative ideas. Such forums foster collaboration, peer support, and collectiveproblem-solving, which are essential for maintaining enthusiasm and effectiveness in gamified instruction.

By addressing these five key areas with targeted initiatives, Algerian middle schools can build a robust ecosystem that supports the widespread and effective use of gamification, ultimately enhancing language acquisition and learner engagement. These recommendations emphasize that successful gamification is not solely dependent on technology but also on systemic support, professional empowerment, and collaborative networks.

5. Conclusion

This study has provided a comprehensive and in-depth analysis of the data collected through semi-structured interviews administered to language teachers and detailed classroom observations conducted in selected middle schools across Oran and Saida. The findings collectively affirm that gamification, when thoughtfully designed and effectively implemented, serves as a powerful and positive influence on language acquisition among middle school learners. Through increasing student engagement, enhancing vocabulary retention, and creating a supportive, low-anxiety learning environment, gamified teaching strategies contribute significantly to improving learners' motivation and overall language proficiency.

Looking ahead, future research could expand the scope of inquiry by investigating the long-term effects of gamification on student learning outcomes and engagement, tracking progress over multiple academic years. Comparative studies across different subjects beyond language learning, as well as analyses of gamification's impact across varying grade levels and diverse educational contexts, would further deepen understanding and inform tailored implementation strategies. In sum, this study lays a strong empirical and conceptual foundation for recognizing gamification as a valuable tool in modern language education. At the same time, it calls for coordinated efforts among educators, policymakers, and stakeholders to overcome existing challenges and unlock the full transformative potential of gamified learning in Algerian middle schools.

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