Gamified Romanian for Specific Purposes: A Journey to Engaged Language Acquisition

Andreea NECHIFOR
Transilvania University of Brașov

Abstract: *This study investigates the use of gamification techniques in teaching Romanian as a foreign language (RFL) to international students in a Preparatory Year program. It involved 27 students who achieved an A2 proficiency level after one semester. The gamification approach was implemented from February to June 2022, focusing on enhancing productive language skills and specialized terminology in engineering, medicine, and sports. The methodology, framed by Design-Based Research (DBR) and rooted in Self-Determination Theory, incorporated gamified systems to create a sense of community, provide freedom of choice, and create advancement opportunities. Various digital tools and platforms, including GooseChase, Storyjumper, Plickers, Wordwall, Kahoot!, and ClassDojo, were utilized to support the gamified learning environment. The approach aimed to boost student engagement and make language learning enjoyable by blending face-to-face activities with game-like frameworks. The study suggests that gamification can effectively transform educational practices, particularly in teaching Romanian for Specific Purposes. By cultivating a game-inspired atmosphere, the method promoted intrinsic motivation, encouraged active participation, and enabled students to develop language competence through self-directed progress. While acknowledging some negative aspects, the research highlights the potential benefits of gamification in language education, demonstrating its ability to create an engaging, communicative learning environment that connects virtual and real-world contexts.*

Keywords: *gamification; education; Romanian as a Foreign Language; Romanian for Specific Purposes; specialized terminology acquisition;*

1. Introduction

Based on the ground-breaking idea of introducing *gamification* into the Romanian academic forum of researchers and foreign languages methodology instructors, the present study draws its roots from previous background of the authors in the field of specialized language acquisition practices in the digital era (Nechifor 354-375). Moreover, it capitalizes on scattered figments of outputs generated as a result of working with this concept at the Preparatory Year of the Faculty of Letters from *Transilvania* University of Brașov grounded in the research conducted within the nationally funded project '*Gamification* Based Instruction in Teaching Romanian as a Foreign Language' and shared with interested peers and fellow researchers on the occasion of workshops, dissemination conferences

and even previous articles or monographs (Burbea et al. 3-20, Nechifor et al. 324-331, Nechifor et al., Săftoiu et al. 200-206).

For more than 20 years, since the term was coined in 2002 by Nick Pelling, *gamification*, i.e., 'the use of game-specific elements in non-game contexts' (Deterding et al. 9), has gained increasing importance in various industries such as retail, banking, politics, healthcare, information technology, telecommunications, marketing, human resource management, internet technologies, health and education to increase user engagement and productivity.

Gamification applies gaming elements to professional contexts to enhance employee engagement, motivation, and performance. It encourages collaboration, stimulates achievements, and provides constant feedback for skill improvement. Companies use *gamification* to promote wellness programs and increase job satisfaction. This approach integrates game mechanics like competitions, points, rewards, and interactive feedback into non-game contexts, creating immersive experiences. The goal is to transform ordinary activities into engaging experiences that stimulate continuous learning. *Gamification* extracts core elements from the fictional world of games and applies them to real-life domains. This creates a more pleasant working environment where individuals are encouraged to be creative, motivated, and initiative-taking within necessary organizational limits, much like rules in a game prevent disorder.

2. Literature review

Rooted in psychology and motivation theory, Werbach and Hunter's studies on *gamification* from 2015 and 2020 elaborate on how various components (C) - such as achievements, interactions with superiors, reward collections, avatars, leader boards, missions, social graphs, badges, and virtual goods – unlock content and enhance reward mechanisms. These components work in conjunction with mechanics (M), which include challenges, cooperation and competition, feedback, resource acquisition, and transactions, as well as with dynamics (D) that consider constraints, emotions, narrative progression, and interpersonal relationships. This holistic framework can benefit companies, institutions, educational settings, and various life experiences.

Expanding on Werbach and Hunter's three-level pyramid of *gamification* designed in 2015, the dynamics promotes choice within limits, generates emotions, creates coherent narratives, and enables relationships. The mechanics involves cooperation or competition, establishes challenges, provides rewards, and delivers real-time feedback, activating both extrinsic and intrinsic motivation. The components encompass achievements (points, badges), leader boards, avatars, and obstacles, fostering a social dynamic that keeps participants engaged. This gamified structure can successfully be

applied education, by promoting engagement, cooperation, and learning through game-like elements, such as unlocking content and earning rewards, while enabling socialization as a means of progression.

However, the success of this comprehensive *gamification* framework relies on two critical factors: selecting the elements that best suit the specific context, as mere usage does not guarantee attainment, and recognizing that the overall participant experience often holds greater value than the individual elements alone.

2.1. What is *gamification* and what is its didactic approach? The ramifications of the concept and its implementation in education

The introduction of gamification-based teaching techniques in education is based on the idea that game-specific principles and mechanisms can boost learners' motivation to engage in learning activities (Adams, Dormans). Studies on *gamification* in education (Hamari et al. 3025-3034, Faiella, Ricciardi 13-21, Bell) have highlighted key benefits, such as increased motivation – especially intrinsic motivation – and enhanced engagement, particularly when learners can choose their preferred learning methods (Faiella, Ricciardi 13-21). Courses structured with *gamification* concepts were perceived as more motivating, interesting, and useful compared to traditional methods (Dichev et al 80-100, Faiella, Ricciardi 13-21). While *gamification* may motivate extrinsically through rewards like points and badges, educators can enhance course satisfaction and activate intrinsic motivation by creating positive experiences and connecting learning to real-life contexts.

Research by Sitzmann (489-528) shows that *gamification* can improve long-term knowledge retention, and Faiella and Ricciardi (13-21) found that it reduces anxiety about failure. They also suggest *gamification* promotes community building by celebrating successes as a group, not just among high-achievers, and that immediate, meaningful feedback positively affects learning outcomes.

Though traditional education has long used game-like elements (e.g., grades, points), it often results in social and emotional disengagement due to rigid rules (Rock 64-72). *Gamification*, however, offers the chance to experiment with rules, emotions, and social roles (Lee, Hammer 1-5), helping learners reshape their self-concept and identity as learners (LeBlanc). It allows them to track their progress, with most researchers agreeing on the positive impact of *gamification* in education (Alomari et al. 395-417), particularly in language learning (Danowska-Florczyk, Mostowski 1-4, Figueroa Flores 32-54, Cahyani 1-6). *Gamification* also provides comfort for students alienated by traditional methods, and may help address the ongoing decline in learner motivation and engagement within the educational system.

Gamification in education applies game elements to enhance learning motivation and engagement. Werbach and Hunter, in both their studies, describe how this approach breaks down game mechanics for educational use. It cultivates a sense of community, stimulates creativity, and benefits all educational stakeholders. Key features include: interactive learning through competitive elements, rewards, and clear goals, encouragement of consistent effort and continuous improvement, enhanced collaboration through team missions and activities, promotion of cooperative problem-solving and constructive competition, personalized learning with real-time feedback and adaptive activities.

This approach is particularly beneficial for skill development, including language acquisition like RFL. It creates a flexible, dynamic learning environment that accommodates diverse learning styles and improves both individual abilities and social skills.

2.2. Conceptual differences between *gamification* and game-based teaching

Gamification and game-based teaching/learning are two distinct educational approaches, each with specific characteristics and objectives. Although both involve the use of game elements in the context of learning, there are significant differences between them, both in terms of underlying concepts and in their practical application.

Game-based teaching focuses on integrating interactive activities into education to facilitate learning and skill development. According to Pivec (387-393), this method creates a stimulating environment where students use playful activities to solidify knowledge, often targeting specific aspects of a lesson. Unlike *gamification*, which applies game elements to the entire educational process, game-based teaching uses specific activities, like role-playing or simulations, to meet immediate learning needs. However, these activities are limited to particular moments and do not redesign the entire teaching-learning process in a game-like structure.

Educational game-based teaching is a specific technique within the broader educational process, alongside methods like task-based or project-based learning. As Gee (20) suggests, it integrates play elements into teaching activities, creating an interactive environment that enhances engagement and develops problem-solving and critical thinking skills. Squire (19-29) further argues that educational games can be adapted to various learning styles and individual needs, allowing personalized skill development and exploration of interests. This approach provides an enjoyable and stimulating way to enhance student understanding and engagement in the learning process.

However, a fundamental difference between *gamification* and didactic game-based teaching lies in their purpose. *Gamification* is a broader strategy that uses game elements to motivate and engage users in a specific context, such as education or work. It aims to create a long-term, immersive experience with various teaching techniques, including game elements. On the other hand, game-based teaching focuses on using playful and interactive activities to help students learn and develop their skills. It is more directly tied to specific learning goals and involves integrating game elements into the educational process itself. Thus, teaching through the educational game involves using the game itself, in its totality, as the main vehicle for facilitating the delivery of the educational content. It is used to provide direct and interactive learning experiences through which pupils/students learn and become actively involved in their own learning process.

Consequently, while didactic game-based teaching focuses on the use of games as the primary means of teaching, *gamification* extends game concepts and applies them in other contexts to enhance the overall language learning/acquisition experience.

2.3. Motivation and *gamification*

Since Edward Deci's 1975 study on intrinsic motivation and Ryan Richard's development of self-determination theory in 2000, numerous studies have focused on human motivation. The original model emphasized two opposing types: extrinsic motivation (based on external rewards, social recognition, or avoidance of punishment) and intrinsic motivation (based on personal satisfaction, pleasure, or interest).

Ryan and Deci (54-67) later expanded the theory by introducing extrinsic primed motivation, where external factors stimulate and influence intrinsic motivation. Self-Determination Theory (SDT) is based on three core needs: autonomy, competence, and relatedness. Meeting these needs enhances motivation, engagement, and psychological well-being.

Over time, SDT has become a leading model in motivational psychology, explaining how people regulate behaviour and pursue goals based on their motivation levels and satisfaction.

2.3.1. Theories of motivation and its role in teaching processes

SDT is a psychological framework that explains how people regulate their behaviour based on their motivation. It distinguishes between intrinsic and extrinsic motivation. Intrinsic motivation is driven by internal factors such as interest, enjoyment, and a sense of personal satisfaction. Extrinsic motivation is driven by external factors such as rewards, punishment, or pressure from others. According to this theory, people are more likely to be motivated and achieve their goals when they have a sense of autonomy, competence, and

relatedness, with autonomy referring to the feeling of having control over one's own actions and decisions, competence to the belief that one is capable of succeeding at a task, and relatedness to the feeling of being connected to others and having a sense of belonging.

In the context of education, SDT suggests that teachers can motivate students by creating a learning environment that favours autonomy, competence, and relatedness. This can be done by providing students with opportunities to make choices, offering them challenging but achievable tasks, and creating a supportive and inclusive classroom culture.

SDT discusses a continuum of motivation, ranging from a complete lack to intrinsic motivation. This gradation reflects how external and internal factors influence an individual's motivation.

Ryan and Deci (54-67) describe this progression as starting with regulators, where individuals lack motivation and feel controlled by external factors, continuing with introspections, where they become more aware of their own motivations and feelings, and with identification, where individuals internalize external goals and make them their own. Finally, they reach integration, where they are fully self-determined and motivated by their own intrinsic desires, values, and interests.

Self-determined regulation is considered the highest form of internal motivation. It is driven by a deep sense of personal commitment and involvement in a task or activity. Individuals who are self-determined are more likely to be motivated, persistent, and successful.

Self-determined regulation is a key aspect of internal motivation. It involves individuals regulating their behaviour based on their own interests and values. This is driven by the pleasure and satisfaction they derive from the activity itself. When people engage in self-determined regulation, they take responsibility for their own motivation and actions, without needing external incentives or rewards.

2.3.2. Teaching through *gamification* and the role of the concept in stimulating motivation

Gamification in education introduces fun and enjoyment to learning, addressing the limitations of traditional extrinsic motivators like grades or praise. It acts as a catalyst for a new educational approach, generating and cultivating intrinsic motivation while complementing extrinsic motivation. People engage with gamified systems out of curiosity and perceived benefits as the ideal scenario created engages individuals in activities purely for the pleasure they bring. The social aspect allows players to share enjoyment, nurturing intrinsic motivation and thus, self-determination in gamified environments encourages creativity within structured rules.

This approach aligns with the natural human inclination towards engaging in enjoyable activities, making it a powerful tool for enhancing learning motivation and experience. Ryan and Deci's SDT (54-67) centres on three key elements essential for intrinsic motivation: competence, autonomy, and affiliation.

Competence is the belief in one's ability to accomplish tasks, enabled through trial and error in games, allowing for learning and improvement. Autonomy refers to the freedom to make choices, as games often offer players the flexibility to choose paths and strategies, promoting a sense of control. Affiliation is the need for connection, fulfilled by the social interactions provided by games, allowing for collaboration, competition, or shared experiences. All three are vital for intrinsic motivation in learning. When learners experience them, they are more likely to stay motivated, persist through challenges, enjoy learning, and find it meaningful.

Current research continues to explore the relationship between motivation and positive psychology, as seen in the work of Seligman and Csikszentmihalyi (1-14). In 2004, Csikszentmihalyi introduces the concept of 'flow' (35-36), a state where individuals experience intense pleasure and challenge while voluntarily engaging in an activity. Flow, or playful consciousness, is not directly a feature of *gamification*, but emerges as a potential result in environments designed around it.

Csikszentmihalyi defines 'optimal experience' (35-36) as a state where individuals become deeply absorbed in an activity for the pure pleasure it provides. This optimal experience not only enhances enjoyment, but also promotes learning and personal development, as skills improve while overcoming challenges. Thus, nowadays, the flow state can be linked to better performance, creativity, skill development, self-esteem, and stress reduction suggesting that *gamification* in education can effectively increase student engagement by cultivating flow experiences.

Carol Dweck's motivation theory from 2010, particularly her model on mood change, provides insight into *gamification* by incorporating cognitive-motivational elements like responses to obstacles and goal-setting. Dweck identifies two mindsets: a fixed mindset, where students believe success is due to unchangeable innate ability, and a growth mindset, where students see success as the result of effort and perseverance and who tend to be more intrinsically motivated to learn and improve.

Gamification taps into both extrinsic and intrinsic motivation to engage learners by offering a dynamic, challenge-based approach. This method encourages discovery, experimentation, and problem-solving in a fun and relaxed way, promoting deeper cognitive reflection.

3. Unveiling the Methodological Framework: Exercises Design, Participants, and Data Collection

GIRO/TE/206 project focused on integrating *gamification*-based methods into RFL teaching, examining how RFL courses could be macro-designed based on *gamification* principles. The goal was to create a complex system of interactions to enhance learner motivation during the learning process, with the experimental phase running from October 2021 to June 2022. The study involved 27 international students (9 girls and 18 boys, aged 19–22) enrolled in the Preparatory Year at *Transilvania* University of Brașov. Classes were held six times a week and were taught by four teachers. Despite starting with an A1+ proficiency level, students initially showed low motivation, marked by irregular attendance, incomplete homework, and passive participation. By the end of the second semester, the students took an exam to certify their B1 level in Romanian, preparing them for undergraduate studies. Ethical approval was obtained, with students providing consent through the 'Class Story' section of the Class Dojo platform.

3.1. Teaching RFL through *gamification*. Methodological aspects

The present study utilized Durrheim's (33-59) definition of observation as a strategic framework, adopting a qualitative, naturalistic method in the first semester to report real-world classroom events non-invasively. This aligned with Hammersley and Atkinson's idea from 1995, that naturalistic research observes participants in their natural environment, such as a classroom, without interference. Thus, a cross-sectional approach was employed in the first semester, using observation and field notes to identify weaknesses, while in the second semester, the DBR framework was implemented to refine teaching methods, as, according to Collins (15-22), this one allows researchers to 'test and refine educational concepts based on principles derived from previous research' (Collins et al. 15). This approach facilitates real-time adjustments based on student feedback, making students active participants in shaping their learning environment. Being an iterative process, it adjusts programs, practices, or learning tools according to real-time needs, making research adaptable and efficient. Learners are not passive recipients but active agents, contributing to the process by formulating questions, suggesting improvements, evaluating and reporting results (Collins 15-22), this collaborative approach empowering learners to engage more deeply in the educational experience.

Building on the direct observation method from the first semester, which highlighted low student motivation, and leveraging the research team's expertise in *gamification* and its application in education, the teaching approach focused on developing a *gamification*-based framework for teaching RFL – a first in Romanian academia. Thus, in response to issues of

student motivation and participation – stemming from cultural and language differences – *gamification*-based methods were introduced in the second semester of the 2021-2022 academic year. Grounded in SDT (Ryan, Deci 54-67), which emphasizes autonomy, competence, and relatedness, the *gamification* approach utilized game mechanics (Hunicke et al.) to address these motivational needs, aiming at enhancing productive language skills (speaking and writing) in general modules and facilitating the acquisition of specialized terminology in fields like engineering, medicine, and sports, tailored to students' future academic goals after completing the Preparatory Year.

A game scenario was developed with weekly levels, where students aimed to accumulate points and earn a surprise reward at the end of the semester. To sustain interest and encourage intrinsic motivation, additional surprise elements were introduced during the game. The framework for gamified teaching was designed by setting macro-objectives linked to motivation theories and selecting key components from Werbach and Hunter's 2015 *gamification* pyramid. For this, appropriate digital platforms and mobile applications were also chosen to integrate these elements and address the challenges observed in the first semester.

3.2. Teaching productive language skills through *gamification*

The first decision taken was to replace Moodle with ClassDojo as the primary tool for integrating *gamification* elements in the classroom. Unlike Moodle, ClassDojo is specifically designed to support gamified learning by allowing the creation of tasks, assigning points, using avatars, and offering real-time feedback and rewards based on students' progress. Each student can track their points, interact in the 'Class History' section (similar to a game chat), upload assignments in the 'Portfolios' section, and send private messages to peers. Additionally, the platform supports activities like creating online portfolios, presenting posters, and interactive writing tasks.

Considering that the platform integrates one of the most appreciated *gamification*-based techniques – avatar customization – giving learners the option to individualize their alter-egos (body size and shape, eyes, mouth, choice of colours, accessories, etc.) after the 'monster' hatches from a giant egg after 4 weeks, the fun aspect was successfully marked from the very beginning. Therefore, students were invited to choose an avatar to represent them in the online environment of the educational experience and already started having fun during the enrolment, which led to the creation of a sense of anticipation as learners were eager to discover what their digitally disguised appearance would look like.

The platform also gives the teacher the possibility to break the giant eggs before the mentioned period, which helps to generate a fun teacher-

student negotiation and to set attendance rules from the very beginning, as a student's non-attendance in the first part of the semester can lead to the breaking of the avatar-egg by the teacher, and the loss of the first privilege in the *gamification*-based world.

Among the next decisions that were made regarding the implementation of *gamification*-based methods was the introduction of one of the most effective game elements, the points, badges and leader boards (PBL) system. As a rule of thumb, points were awarded for accomplishing a task within the system, such as completing it within a certain timeframe; badges were often awarded for interacting with the system, such as logging in every day for a week; leader boards showed a user's position in comparison with other users. For the Preparatory Year student groups, a system of points was set up that could be awarded, or cancelled.

Thus, each student received points for certain aspects of the work during the RFL courses, the choice of creation and attribution being based on the conclusions resulting from the identification of problems in the first semester, in order to motivate students. Given that one of the important negative aspects was related to the way of reporting on homework performance, the teachers decided to award points as follows: 1 point for attempting the homework, 2 points for partial homework and 3 points for complete and correct homework, as the students' previous involvement in solving this task was very low. In this way, students progressively started to dedicate themselves to solving the homework as they could practically see the reward for their effort.

Other aspects that needed to be improved through the reward system, derived from the observation method in the first semester, included: presentation skills (3 points), excellent response (5 points), excellent idea (3 points), participation in activities (2 points), teamwork (2 points), peer voting (2 points), best score in a partial test (5 points), contributing to an event (5 points), helping others (1 point), hard work (2 points), with points subtracted for: not participating in activities (-2 points) and incorrect/not to the point response (-1 point).

Thus, for each aspect, each student was assigned a number of points that they could receive, as well as one or more badges, according to the tasks completed. The points could be cancelled for lack of learner engagement or for answers that were not consistent with the task.

Each week in the gamified course represented a level, with a partial leader board announced on ClassDojo every Friday. Students were informed from the start how points earned would convert into appreciation badges, which they collected physically. Weekly rankings were also posted on an external platform, leaderboardhq.com. By the semester's end, the virtual rankings translated into a percentage of final exam grades or even the final

grades, depending on task complexity. Additionally, various apps like GooseChase, Storyjumper and the portfolio section of the ClassDojo platform were integrated to personalize learning in a game format. Student motivation was tracked through observation grids, and progress was assessed with tests on platforms like Kahoot! and WordWall, rewarding quick, correct responses with more points.

As the mechanics were meant to be engaging, clear instructions were given to the learners on how to introduce the concept of scaffolding and to offer freedom of choice in personalizing learning and assessment by offering options (e.g., the option between submitting a classic homework, designing a poster, recording a video, creating an online book, etc.). To create a sense of community, working groups have been set up on the ClassDojo online platform so that learning experiences can be shared by and with everyone.

The Plickers platform was used to encourage competition and fun dynamics by displaying real-time results from students' answers. It allowed for interactive assessment of individual progress, with personalized student accounts and original test items created by teachers for sensitive grammar and vocabulary areas. Plickers facilitated dynamic feedback through QR codes, where students' responses were scanned and displayed on-screen, allowing teachers to track real-time performance, hesitation, and overthinking. The online version was no less interesting, allowing teachers to track students' real-time answers, including speed and rethinking, providing insights into test construction and student difficulties. Hesitation or frequent answer changes highlighted weak areas in students' knowledge.

Progress tests were pivotal game moments, earning students points, with the goal of motivating them to master vocabulary, while encouraging creativity and originality in their projects. Both linguistic accuracy and original ideas were consistently rewarded with points, promoting engagement and precise expression.

3.2.1 Oral expression through *gamification*

The ClassDojo platform facilitated the creation of engaging and practical homework tasks tailored to students' needs. Students could generate texts, enhance their written work with images, and upload their video or audio materials. This flexibility not only allowed for creative expression but also enabled students to engage in the assessment process by reviewing their oral presentations with the teacher, discussing both the strengths and weaknesses of their content and delivery. For instance, students in the medical language group could design a presentation on a new drug, incorporating *gamification* elements like choosing ingredients, naming the drug, and imagining its application. This exercise encouraged the use of specialized vocabulary and developed their oral communication skills. After a collaborative evaluation of their videos, a vote was

conducted to select the best presentation, with points awarded for various aspects of the project.

The platform's point system incentivized the development of presentation skills and participation in class events, fostering speaking confidence and initiative. By earning points for these contributions, students experienced a sense of progression, as they could advance to higher levels of achievement by accumulating points.

The concept of scaffolding in pedagogy was popularized by Vygotsky in 1980, by linking it to his theory of the zone of proximal development (ZPD), which advances that learning is most effective when students receive support to understand and address problems progressively. Scaffolding allows teachers to offer tailored guidance, helping students tackle more complex concepts as they advance in their learning. This approach is vital in cognitive development theory and contemporary teaching practices, as it enables learners to transition from simpler to more complex levels of understanding in a structured manner.

To apply the scaffolding concept, a two-step activity was created. The first step involved an in-class event where students prepared individual presentations in Romanian about their home countries. This initiative generated significant enthusiasm and engagement, culminating in a peer vote, point allocation, and a clear ranking of presentations. The event was promoted on the ClassDojo platform and provided a small-scale public speaking experience, creating a supportive environment for students.

The trigger for this moment was a level-up game scenario, where only the top four students, based on peer votes, could advance to the next level by participating in a national conference organized by the 'Petrol și Gaze' University of Ploiești. This conference focused on cultural aspects related to the participants' countries and was held online in the 2021-2022 academic year. The opportunity to move up a level through an enjoyable internal competition served as a powerful motivator, fuelled by *gamification* elements. Consequently, the four highest-ranked students participated in this educational event, which included the excitement of facing potential challenges (or 'boss fights') and the element of surprise.

The concept of a 'boss fight' in *gamification*, drawn from video games, represents a significant challenge in the learning process or competition. In traditional gaming, it involves facing a formidable enemy, marking the climax of the game and requiring advanced skills and strategies to succeed. For the selected four participants from the Preparatory Year, the chance to compete at the next level served as an opportunity for individual growth, as each student refined their presentation, public speaking skills, pronunciation, and vocabulary.

Consequently, *gamification* in teaching RFL has been effectively applied using the mechanics from Werbach and Hunter's 2015 pyramid and a project-based approach through the ClassDojo platform.

3.2.2 Written expression through *gamification*

Gamification-based teaching transforms the writing process into a dynamic and rewarding experience, making language challenges motivating and interactive. This innovative approach encourages creativity, exploration, and continual improvement in foreign language skills.

Two sub-modalities were employed to enhance Romanian writing competence among the Preparatory Year students: creating mini writing projects/portfolios on ClassDojo and developing macro writing projects/books on Storyjumper. The semi-guided portfolios emphasized vocabulary development, covering general and specialized topics, such as describing an excursion or writing an invitation, allowing for various writing styles from descriptive to practical.

In project creation, students had the freedom to choose between simple text or text with images, raising a gamified environment where theme development was guided, and personalized feedback was provided on their ClassDojo portfolios. For personalized books on Storyjumper, students were encouraged to explore creativity and originality through choices in colours, backgrounds, character construction, and background sounds, maximizing the use of digital skills and sensory engagement.

To tackle the creative writing task, students produced digital books centred on personal experiences using general vocabulary or related to their future specializations. For instance, some shared stories about their arrival in Romania, incorporating images and avatars to enhance engagement, while others narrated tales about an optical instrument using physics vocabulary. The writing process varied, with some books created individually and others collaboratively in groups of three, addressing diverse needs in developing writing skills based on topic, context, or purpose. This approach activated different levels of Werbach and Hunter's 2015 *gamification* concept pyramid, including dynamics, mechanics, and components.

These writing exercises also served as opportunities for students to earn points on the ClassDojo platform, contributing to their progress in the gamified experience. Some authors further enhanced their projects by orally reading their books, blending written and spoken text production.

3.3 Teaching specialized vocabulary through *gamification*

Participation in various activities within the RFL classes cultivated a sense of community, socialization, and competition, creating an engaging atmosphere akin to a game. Points awarded on the ClassDojo platform for positive

engagement helped unlock different levels of the *gamification* pyramid defined by Werbach and Hunter in 2015. This system encouraged students to have fun, be active, communicate, and continuously practice their speaking skills.

To facilitate this, the GooseChase mobile app was utilized as a teaching tool for hands-on activities that integrated teamwork with vocabulary *application*. It was effective in providing real-life context for specialized language use in fields like medicine, sports, and engineering. GooseChase enabled the design of original tasks requiring students to demonstrate vocabulary usage through various formats, including written text, videos, and geo-spatial positioning on the app's digital map.

Learning new vocabulary poses challenges for language learners, but it can be effectively addressed through various methods. The communicative approach to teaching has been successful in helping students contextualize new vocabulary for long-term retention. The goal for learners was to engage with real-life experiences, gain hands-on practice, and learn specialized language in an enjoyable manner.

Using the GooseChase application, team missions were designed to be carried out in Romanian, encouraging participants to explore the city and collect data related to specific specialized vocabulary. This approach not only focused on language skills, such as understanding instructions and producing oral or written messages, but also emphasized cultural awareness by guiding students to identify various locations in Brașov, like car washes, vulcanization centres, hospitals, sports centres, etc.

The activities required teamwork and coordination, promoting a sense of unity and collective achievement. One notable challenge involved identifying a car registered in Covasna County with the license plate code 'CV'. For instance, one group mistakenly identified a car with 'CV' on its license plate, as it turned out to be from Vatican City (Civitatis Vaticanae).

Out of the original examples of assignments created by the teachers of specialized classes on various subject areas, those focusing on specific vocabulary related to sports, entitled 'Sporting the Romanian Language', and medicine, entitled 'Mobile Medicine', had the following requirement descriptions:

1. Sports Club 1 – Find Dinamo Sports Club from Brașov
2. Sports Club 2 – Find Olimpia Sports Club from Brașov
3. Sports equipment (Basketball) – Photograph items that are part of the compulsory sports equipment for basketball
4. Sports event - Find a sports event that will take place between 2.03.2022-8.03.2022 and take a picture of the poster

5. Aerobic moves – Film at least 1 minute of aerobics/gymnastics/fitness exercises in which you are the protagonist
6. Favourite sport – Film yourself playing your favourite sport
7. Fitness Centre – Find a fitness centre in Brașov and take a photo with it
8. Football pitch - Find a football pitch and take a photo while playing a football match
9. Game rules (Tennis) – Describe in your own words the rules for playing tennis
10. Dream sport – Name the sport you're going to do this summer and give 3 reasons in favour of choosing it

The mission dedicated to specialized language in the field of medicine was carried according to the following tasks:

1. Ophthalmology practice - Find an ophthalmology practice in Brașov and take a picture of it.
2. Medical tests laboratory - Take a picture of a laboratory in Brașov
3. Medical prescription - Write a medical prescription for colds
4. Children's Hospital - Find the Children's Hospital in Brașov and take a photo with it
5. Infectious Diseases Hospital - Find the Infectious Diseases Hospital in Brașov and take a picture of it

Students were organized into three teams (red, blue, and yellow) to complete missions, where they had to identify locations in the city or meet specific requirements using written responses, images or short movies. Even if only one team member was physically present at a location, the entire team collaborated virtually, resembling teamwork in video games.

As a *gamification* tool, GooseChase significantly enhances language education by adopting interactivity, engagement, and skill development while providing immediate and personalized feedback. Through this platform, Preparatory Year students participated in activities that allowed them to apply their Romanian language skills in enjoyable, competitive settings, motivating them to learn in a relaxed environment.

Collaborating on group assignments enabled students to communicate in Romanian and achieve shared goals in real-world contexts. Furthermore, GooseChase offered diverse activities and themes, allowing teachers to create engaging tasks, track progress in real-time, provide feedback, and tailor the learning experience to meet students' needs and preferences.

To enhance specialized vocabulary within a *gamification*-based teaching framework, the Worldwall platform was used to create interactive word games, including a word search that provided instant feedback to

reinforce vocabulary learned during a unit, such as mathematics. Four days before the activity, the specialized group teacher notified students via ClassDojo about the upcoming classroom event and the use of a QR code for individual participation. The point allocation system was also communicated, where the fastest and highest-scoring student would be declared the winner, creating a competitive atmosphere.

As a result, some learners were motivated to redo the task to improve their scores. Rapid feedback helped students connect vocabulary with correct definitions, and the opportunity to retry if they performed poorly was framed as a learning experience, allowing them to prepare better for their end-of-semester exam (Christians 24).

4. Unlocking Insights: Exploring Results, Implications, Constraints, and Future Avenues

4.1. Positive aspects

The implementation of *gamification*-based theories in teaching RFL significantly enriched the learning experiences of foreign students in the Preparatory Year.

Firstly, it has raised active participation in the learning process, transforming language activities into a rewarding game that has greatly enhanced student motivation, which had been low in the first semester. This shift encouraged students to invest more time and energy into improving their language skills.

Secondly, the *gamification* approach, characterized by techniques built around games, projects, and problem-solving, offered excellent opportunities for practicing and reinforcing language skills in an interactive, informal environment. This method effectively extended language acquisition beyond formal university settings, immersing students in real-life communication situations in Romanian, thus promoting the development of speaking and writing, particularly focusing on the acquisition of specialized vocabulary.

In addition, the *gamification*-based teaching method supported collaboration and team spirit among Preparatory Year students, facilitating group work and social interaction in a motivating context. This approach brought together students from diverse social, cultural, and educational backgrounds, enabling them to communicate and collaborate effectively in Romanian while developing crucial social and intercultural skills for success in a globalized world.

Therefore, the introduction of *gamification*, as initiated by the GIRO project in Brașov's academic environment, proved to be an innovative and effective strategy for transforming the learning process into an engaging,

interactive, and successful experience for the international students enrolled in the 2021-2022 academic year at *Transilvania* University of Brașov.

The analysis of the observation grid indicated a notable increase in student motivation. Students, incentivized by the chance to win surprise rewards at the end of the game, practiced Romanian more diligently than in the first semester. Progress and rewards served a dual purpose: enhancing extrinsic motivation while also stimulating intrinsic motivation.

Additionally, students showed greater motivation to complete homework to earn points each week. Their involvement in class activities also rose, as they aimed to collect partial rewards and advance in the game. This heightened engagement was reflected across all participants in the observation grids.

Moreover, progress tests revealed an improvement in Romanian communication skills. By the final test, 62.5% of students achieved a B1 level, and 37.5% reached B2, indicating a significant qualitative leap driven by individual internal motivation. For many, simply reaching the B1 level – required at the end of the Preparatory Year – was insufficient, as they aspired to achieve higher proficiency.

Starting from the negative experience of the first semester, *gamification* provided a cohesive framework for the second one, integrating various applications in the classroom, and forming a structured methodological vision for RFL courses based on identified needs. Despite the diversity of applications, results were consolidated on the ClassDojo platform to fulfil the game objective of earning a surprise reward. Without *gamification* techniques, the apps would lack a clear purpose beyond sporadic use in teaching activities.

Furthermore, the *gamification*-based approach enhanced feedback delivery in a fun and friendly manner. This continuous assessment strategy aligned with *gamification* principles, allowing students to receive advice and revisit incorrect answers to correct them from different perspectives. This method aimed to motivate students towards progressive, cumulative, and consistent learning.

From this point of view, Plickers offers a comprehensive assessment approach by providing instant feedback on student performance, collecting real-time responses, and quickly identifying weaknesses to adapt instruction accordingly. It allows for varied question creation and distribution, including adding images and customizing formats, to create tailored assessments. Additionally, Plickers provides detailed data and reports on user progress and performance over time, which helped identify learning patterns and facilitate personalized interventions.

Likewise, top-ranked students in summative-evaluative games earned points on the ClassDojo platform, aligning with the *gamification*-based

teaching framework. The personalized, real-time digital feedback supported corrective discussions, giving students the opportunity to address inaccuracies in their work and improve their academic performance through replaying the game.

Narrative-explanatory feedback, viewed through a *gamification* lens, enabled a more holistic assessment of students' knowledge and skills. By using clarifying, argumentative elements, this feedback helped students understand their errors in context, illustrating not only their knowledge but also how they apply it in various situations.

4.2. Negative aspects

The success of implementing *gamification* in corporate environments hinges on various factors, including the design and execution of *gamification* elements. Research indicates that *gamification* can sometimes be perceived as forced or artificial, leading to employee resistance or subpar outcomes (Hamari et al. 3025-3034).

A key factor in corporate *gamification* is the management of competition and rewards. Excessive emphasis on competition may result in conflict and a toxic workplace culture, which contradicts the objectives of enhancing collaboration and team spirit (Zichermann, Linder).

Additionally, it is vital to consider the diversity and individual needs of employees when applying *gamification*. A 'one-size-fits-all' approach may not work, as employee preferences and motivations can vary greatly, according to Werbach and Hunter's opinion from 2020.

From a psychological and educational perspective, a significant negative aspect of *gamification* is the potential to make learning overly reliant on rewards. This can lead to counterproductive effects in the short term and blur educational objectives in the medium term, ultimately obstructing positive long-term outcomes. When learning becomes focused solely on earning points or badges, it detracts from the core educational purpose, which is to foster meaningful understanding and retention of concepts.

An illustrative example arose with a student from the research group who inquired about a potential reward for answering a question, demonstrating a misunderstanding of *gamification*, stripped of its educational essence.

To mitigate these issues, it is essential to apply the law of compensation by balancing *gamification* methods with traditional teaching strategies throughout the educational process. This involves alternating between *gamification* levels and selecting appropriate teaching methods tailored to the specific educational context and the needs of the students.

Another potential drawback of *gamification* is the negative reaction some students may have towards extrinsic motivation in learning. While participants in the current study expressed enthusiasm for their involvement, discussions with future Preparatory Year students revealed that external rewards might be perceived as a negative stimulus by some, influenced by their cultural backgrounds and prior educational experiences.

From a technical standpoint, the research faced logistical challenges in implementing a *gamification*-integrated teaching experience. The primary teaching platform, ClassDojo, was chosen for its advantages but lacked the capability to automatically rank students based on point accumulation. To address this issue and incorporate another element of Werbach and Hunter's 2015 *gamification* concept pyramid, the researchers worked with leaderboardhq.com to display weekly rankings of students' learning progress. Alternatively, they could have opted for more comprehensive educational platforms that include leader boards, but chose ClassDojo for its free and accessible services.

4.3. Perspectives

Gamification, as a macro-view of the teaching process combined with game-based, project-based and task-based approaches, alongside traditional communicative teaching, may represent the corollary of the digital era in which language teaching is currently immersed, recreating in classrooms the 3F dimension (friendly, familiar and fun), that students are invited to participate in, i.e., that of play. Rooted in the psychology of self-determination, *gamification* 'plays the game' of motivation, refocusing the arrows, concentrically, on the inner self and its rewards.

Gamification provides an innovative framework for learning RFL by activating self-determination in learners. The approach encourages students to appreciate the language's beauty and the importance of learning it for intrinsic reasons. By stimulating extrinsic motivation, the intention is to cultivate intrinsic motivation, leading to improved communication skills in Romanian. This increased motivation enhances student participation, making learning more enjoyable and meaningful.

In this framework, the goals of the game align with the pedagogical objectives, where game levels correspond to stages in developing communication skills, and surprise elements serve to sustain engagement and motivation. Despite individual differences among students, the diverse and complex nature of *gamification*-based strategies effectively motivates each learner and supports their progress.

5. Conclusions

At the level of dynamics within the layers of the *gamification* concept pyramid, as structured by Werbach and Hunter in 2015, various elements – such as emotions, constraints, narrative, progression, and relationships – were integrated into the research experiment. The teaching process was designed to stimulate student motivation through dynamic relationship-building activities, allowing for freedom of choice within certain frameworks to accommodate their diverse cultural backgrounds and personal emotions.

In terms of mechanics, students faced challenges and encountered chance elements through competitions and rankings. Throughout the second semester, rewards were accumulated, and feedback was personalized, real-time, and constructive. This feedback provided opportunities for students to revise their answers, aiming to enhance their learning performance and unlock higher levels of experience in the educational game, with a strong emphasis on cooperation as the experiment's main focus.

Regarding the components, most elements defining the foundational level of Werbach and Hunter's 2015 *gamification* pyramid were activated. These included course enrolment, avatars, team formations, content unlocking, and advancement to higher learning levels. Rewards took the form of virtual points, physical badges, and electronic leader boards, which collectively boosted motivation and contributed to the experiment's success in achieving its psychological, cognitive, and educational objectives.

Furthermore, progress was monitored at both individual and group levels, with performance assessed for each student by both the teacher and the students themselves. This assessment aimed to enhance working practices and foster the development of specific language skills.

On a cognitive level, *gamification* in RSP/RFL classes enabled learners to engage with specific vocabulary through active and repeated experimentation. Activities such as completing the WordWall crossword puzzle or participating in GooseChase missions provided highly motivating experiences. The presence of a specific goal with immediately measurable results acted as a catalyst for educational engagement.

At an emotional level, *gamification* in RSP/RFL classes facilitated a diverse range of reactions among learners, including curiosity, frustration, anxiety, surprise, and joy (an idea supported by Lazarro in 2004). When stakes are low, learners feel less risk through failure; however, high stakes can lead to frustration and anxiety or negative social comparisons (Martí-Parreño et al 663-676). Quick feedback cycles allow learners to revise mistakes and learn through repetition until they find the correct solution, whereas long feedback cycles hinder opportunities for retrying. In a gamified environment, failure is viewed as a necessary part of the learning process, emphasizing the importance of effort toward achieving personal goals.

On a social level, *gamification* in RSP/RFL classes provided learners with opportunities to test new identities and roles. This was achieved through the fictional characters they selected when enrolling on the ClassDojo platform, which acted as avatars in the gamified Romanian language acquisition experience. Learners also explored new facets of themselves through depersonalization and role-playing scenarios, such as taking on the role of a teacher for an hour and rewarding classmates with coins or points in the game.

However, not all types of learning objectives can be equally supported by *gamification*. Game-specific mechanisms, such as points, badges, and leader boards, should traditionally interact with pedagogical principles, learning objectives, and activities. *Gamification*-based learning is most effective when game principles – such as challenge, clear versus unclear goals, established expectations/success criteria, use of rewards, entertainment, and competition – are harmonized and operationalized through game mechanics (Rabah et al 1-12).

In blended learning, learners actively engage in language learning and develop their language competence. In RSP/RFL classes, entertainment was employed as a component of the *gamification*-based teaching, described as 'a useful tool for achieving better results' (Christians 37). The *gamification* environment advanced a sense of community and relied on learners' intrinsic motivation, encouraging them to practice specialized vocabulary in real-world contexts recreated with familiar principles from the fantastical-digital world of games and to engage in creative activities.

The introduction of *gamification* into academic teaching, exemplified by the GIRO project from which this study originated, marks a significant advancement in modern educational approaches. This innovative paradigm has gathered interest and enthusiasm, alongside various questions, reservations, and critical issues that necessitate careful analysis and evaluation to better understand the characteristics of the concept and its potential benefits for the educational field, including academia.

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