



Teaching Romanian for Specific Purposes in a Gamified Environment

Răzvan Săftoiu¹, Andreea Nechifor², Georgiana Burbea³, Ionuț Căpeneață⁴

Abstract

In recent years, the educational market has been challenged by the unprecedented use of technology for instructional purposes. Educators and students have started to approach teaching and learning in a more engaging way to bridge the gap between face-to-face education and the opportunities of the online environment. In this paper, we address the issue of teaching Romanian for Specific Purposes (RSP) in a blended form, designing face-to-face activities according to a gamified environment that is meant to increase involvement and make learning engaging and entertaining. Using the methodological approach of design-based research, we discuss how activities and syllabi of courses in RSP can be macro-designed according to gamification principles so that it could offer the students the opportunity to immerse themselves in a complex system of interactions whose main purpose is to boost motivation during the process of learning. The target group consisted of 20 international students who had studied the Preparatory Year in Romanian for 5 months, reaching the CEFRL A2 level of Romanian, before starting the classes for specific purposes. The main fields of study were Engineering, Medicine and Sports. The research was carried out from late February 2022 until early June 2022 and was tailored to address the productive language skills, as well as the specialised terminology in the fields mentioned above. Thus, after deciding upon the main frames of gamification to be applied in class, we also selected various applications to cater for the specific needs of our students, through which we customised the learning experience in the form of games (GooseChase, Storyjumper, Plickers, Wordwall, Kahoot) that could be played either individually or as a team. The platform used for interaction was ClassDojo, which opened options for other activities such as online portfolio design, poster presentation, or interactive written assignments. The gamified environment created a sense of community and built on their intrinsic motivation since students were required to practice their vocabulary in the real world or to get involved in creative activities. In the blended class. students are actively engaging in their language learning and are building their linguistic competence.

Keywords: digital teaching, communicative teaching, gamification, game-based learning

1. Introduction

For almost 20 years, since the term was coined in 2002 by Nick Pelling, gamification, i.e. "use of game design elements within non-game contexts" [7], has gained more and more importance in various fields of activity such as retail, banking, politics, healthcare, IT and telecom to increase user engagement and productivity. According to Fortune Business Insights (2019), the retail sector adopted the most gamified solutions, while education seems to be the next most popular sector.

The turn of the century brought about new challenges for the educational market as one could witness an unprecedented rise in the use of technology for instructional purposes. Educators and students have started to approach teaching and learning in a more engaging way to bridge the gap between face-to-face education and the opportunities of the online environment. The surveys carried out by LMS Talent (2014, 2018, 2019) showed that almost 80% of the learners said that they would be more productive if their university were more game-like, over 60% of learners would be motivated by leader boards and increased competition among students, and 89% would be more engaged if the class had a point system (http://elearningindustry.com/30-facts-gamification-in-elearning).

The introduction of gamification in education starts from the premise that the principles of gaming and its specific mechanics are likely to increase students' motivation to engage in learning activities [1]. To date, studies focusing on gamification in education ([10], [9], [2]) have highlighted its primary benefits: increasing motivation, with an emphasis on intrinsic motivation, and engagement, particularly if individuals are free to select a preferred mode of learning [9]. Students perceived gamified courses to be less boring and more motivating, interesting, and helpful for learning than others ([8], [9]). Although gamification can be said to motivate extrinsically, because users are rewarded with points and badges, we consider that teachers should focus on boosting the enjoyment of the class, projecting positive feelings about the subject, and supporting students to become a better



version of themselves by delving in real-life experiences, all of which are examples of intrinsic motivation.

In her study, Sitzmann [17] showed that gamification in education can boost knowledge retention, while Faiella and Ricciardi [9] revealed that gamification helps diminish anxiety or worry over the consequences of not doing well. In addition, they also argue that gamification can be useful in building communities, especially where participants celebrate accomplishments at the level of the whole class, not only at the level of high-achievers. At the same time, they found out that ongoing, immediate, and meaningful feedback can have a positive effect on learning outcomes.

Although schools already have game-like elements (e.g., points for completing assignments correctly, rewards in the form of grades, levelling up when moving to the next academic year etc.), it appears that "students disengage at a social and emotional level" [16] because schools have formal rules. Gamification is an opportunity for teachers and learners "to experiment with rules, emotions, and social roles" [13] and can help learners become who they want to be, i.e., students can develop new frameworks for understanding their school-based activities and even change their self-concept as learners [12], their sense of identity and their social positioning [13]. Thus, gamification in education focuses on helping learners see the progress they are making.

In this paper, we address the issue of teaching Romanian for Specific Purposes (RSP) in a blended form, designing face-to-face activities according to a gamified environment that is meant to increase involvement and make learning engaging and entertaining. Our research can be included in the *micro-gamification* of the learning experience since we implemented it at a small scale, within one academic programme, the Preparatory Year for Foreign Citizens at *Transilvania* University of Braşov.

2. Methodology

Using the methodological approach of design-based research (DBR), i.e., conducting research in context, we discuss how activities and syllabi of courses in RSP can be macro-designed according to gamification principles so that it could offer the students the opportunity to immerse themselves in a complex system of interactions whose main purpose is to boost motivation during the process of learning. We consider DBR as the best-suited methodological approach for our study because it starts from the premise that researchers create, "test and refine educational designs based on principles derived from prior research" [5, p. 15]. In other words, previous curricula, practices, software, or tangible objects beneficial to the learning process are revised according to the actual context so that the required changes can be made quickly and students benefit the most. In DBR, students are not only beneficiaries, i.e., passive receivers, but they become active agents since they are seen as contributors and collaborators, who "formulate questions, make refinements in the designs, evaluate the effects of the experiment, and report the results of the experiment to other teachers and researchers" [4, p. 4-5].

The target group consisted of 20 international students, 8 girls and 12 boys, aged between 19 and 22, who had studied the Preparatory Year in Romanian for 5 months, reaching the CEFRL A2 level of Romanian, before starting the classes for specific purposes. The main fields of study were Engineering, Medicine and Sports. The research was carried out from late February 2022 until early June 2022 and was tailored to address the productive language skills, as well as the specialised terminology in the fields mentioned above.

3. Results

Before the beginning of the 2nd semester of the academic year 2021-2022, we decided to implement gamification during our RSP classes. We started from the premise that we should build on students' intrinsic motivation by taking into account the three basic psychological needs proposed in self-determination theory [6]: Autonomy, Competence, and Relatedness, which are promoted through game mechanics. Since the mechanics should be engaging, we had to give students simple instructions, introduce scaffolding (i.e., level up), offer options so that students are challenged appropriately and can weigh their options against their skill level to make calculated choices, and customize the learning experience by providing various choices (e.g., submit a classic assignment, design a poster/ YouTube video, create an online book etc.). Apart from that, we needed a platform to connect and provide support for our students as well as to provide regular feedback and rewards so that students could be given a boost of accomplishment.





To create a sense of community, we built the online groups on ClassDojo so that we could connect, communicate, and share learning experiences with our students. This platform offers the option of customizing avatars once the "monster" (Fig. 1) hatches from a giant egg after one week.



Fig. 1 Customized avatars

From the beginning, the platform included one of the most favourite gamification techniques – customization of avatars – and successfully created a sense of expectation since students were keen on discovering what their avatar would look like. The platform opened options for other activities such as online portfolio design, poster presentation, or interactive written assignments.

One of the most effective game elements is a system of points, badges and leader boards (PBLs). Points (or achievements) are given for accomplishing something in the system, such as finishing a task in a set amount of time; badges are often given for interacting with the system, such as logging in every day for a week; leader boards show a user's ranking in comparison to other users. In our groups, we created a system of points that either could be awarded for positive actions (see Fig. 2) related to the activity during the class (e.g., giving a great answer, putting forward a great idea, being involved in teamwork activities) and to home assignments, as well as for actions that needed further work or could be redeemed for lack of involvement or for being off task (see Fig. 3).



Fig. 2 Positive actions

Fig. 3 Actions that needed further work

After deciding upon the main frames of gamification to be applied in class, we also selected various applications to cater for the specific needs of our students and to customise the learning experience in the form of games (Wordwall, GooseChase, Storyjumper, Plickers) that could be played either individually or as a team. In choosing the online applications, we started from the premise that *the core mission* during the RSP class is *learning and practising new vocabulary*. We wanted students to immerse themselves in the gamified lesson/ string of lessons and also relied on their creativity when preparing and delivering presentations.

Learning new vocabulary is a challenge and may be achieved in various ways. Since we wanted our students to delve into real-life experiences and learn the specialised language in a fun way, we designed team activities in GooseChase as missions (Fig. 4) that needed to be carried out in Romanian, throughout the city.





| goosechase Game Manager | Mecanică distractivă | | | |
|----------------------------|----------------------|---|---|-------------------|
| | | Cum te cheamă? | 200 ja echipā. Editați fotografia pentru a include numele echipei in p | 0 Points Doză. |
| | | Curat-murdar | 300 | 0 Points |
| GAME SCRIPT | | Realizați o poză cu echipa | în fața unei spălătorii auto din oraș. | |
| BRANDING | | Cu ce vă pot ajuta? Realizați o poză cu echipa | 400 În fața unui magazin de piese auto din oraș. | 0 Points |
| 🕒 START & STOP | | La vulcanizare | 400 | 0 Points |
| In-Game | | Realizați o poză cu echipa | la o vulcanizare din oraș. | |

Fig. 4 Missions in GooseChase

Apart from the linguistic component (i.e., comprehension of instructions and production of oral/ written messages), such an activity dwells on the cultural element since students were asked to identify various places in Braşov (e.g., car wash, tyre repair business etc.). Getting around the city involved the participation of all members of the team and coordination of activities, thus emphasizing the sense of togetherness and shared achievement.

We used interactive word search with instant feedback (in Wordwall) to reinforce the learned vocabulary at the end of the Mathematics unit. To create a sense of expectation, but also to get students to review the specialised vocabulary, we sent a message four days before the actual task began, announcing the students that the activity will take place onsite and that they will receive a QR code to do the activity individually. We also instructed students that the points will be awarded to the student who finishes the fastest, but who also has the highest score. This created a sense of competition and, at the end of the activity, some students felt motivated to do the word search again until the instruction was achieved. We assert that the quick feedback gave students a better grasp of where they stood, by identifying the vocabulary items they had learned with the correct definitions. At the same time, giving them the chance to retry if they performed poorly is in close connection with reframing failure as a learning opportunity so that they study more [3, p. 42] before the exam at the end of the semester.

When it came to practising new vocabulary, we wanted to emphasize students' creativity and suggested that they should write an online book in groups of three. For this purpose, during one of the classes dedicated to the Physics unit, we invited students to choose an optical instrument and design an online book (in Storyjumper) about it using some of the previously taught vocabulary. At the end of the class, the books were presented orally by the team leader.

4. Conclusions

At a *cognitive* level, gamifying RSP means that students get to explore specific vocabulary through active repeated experimentation (e.g., doing an activity until he/she is in first position) and discovery (e.g., GooseChase). We believe that having a specific goal with immediate or short-term measurable results is motivating for learners.

At an *emotional* level, gamifying RSP means that students get to experience a wide range of emotions, from curiosity to frustration, from anxiety to surprise and joy (also in [11]). If the stakes are low, students risk very little by failing; if the stakes are high, students experience frustration, anxiety, or negative social comparison [14]. If feedback cycles are fast, students get a chance to review their mistakes and learn by repeating the same issue until they get it right; if feedback cycles are long, students do not get a chance to try again. Thus, in a gamified environment, failure is reframed as a necessary part of learning, which means that the effort to reach a personal objective is rewarded.

At a *social* level, gamifying RSP means that students get to try on new identities and roles. It may be a fictional character or they may explore new sides of themselves (e.g., being a teacher for one class and rewarding his/her classmates with in-game currency/points).

We are aware that not all types of learning objectives may be equally gamified. That is why, game mechanics (points, badges, and leader boards) should interact with pedagogical principles, learning objectives and learning activities. Gamification of learning is most effective when the principles of gaming (challenge, clear vs. fuzzy objectives, established expectations/ success criteria, use of rewards, the introduction of a sense of fun and competition in interaction) and learning are aligned and operationalized through game mechanics [15].

In the blended class, students are actively engaging in their language learning and building their linguistic competence. During the RSP classes, we introduced fun as a component of gamification, "a





useful tool to achieve a greater outcome" [3, p. 37]. The gamified environment in the RSP classes fostered a sense of community and built on students' intrinsic motivation since they were required to practice their vocabulary in the real world or to get involved in creative activities.

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