

Stories or Scenarios: Implementing Narratives in Gamified Language Teaching

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ABSTRACT

This study focuses on the analysis of the narratives of 29 gamified didactic interventions (GDIs) by foreign language teachers. Two types of narrative were identified: those which included a story, and those which only set up a scenario. Both types were analysed considering the following criteria: the narrative they were based on; the genre applied; the plot they followed; their duration; the inclusion of roleplaying; and their design appeal. Results show that most of the GDIs used a scenario since this makes implementation easier for teachers. However, the GDIs using a storyline as the backbone were more coherent in their gamification as the elements were integrated in a meaningful way.

Author Keywords

Gamification; Foreign Language Teaching; Narratives,

ACM Classification Keywords

- Applying computing

- Education
 - Computer Assisted Instruction
 - E-learning

INTRODUCTION

Gamification narratives are a fundamental dynamic in a gamified process [36] [14] and directly influence the type of gamification which is developed - that is, whether it be structural or content gamification [15]. Although it is possible to add a story, characters and other game elements to structural gamification, adding story elements to a course could alter the content to make it more game-like [15] [8]. Werbach and Hunter [36] listed the narrative as one of the game dynamics which is key for engaging participants.

Introducing a semantic layer, either using a story or a theme [10], helps to give coherence to the gamification and helps to make it more easily understood [3]. According to van der Meer [23] “the narrative is the experiential scaffold within the thematic framework that you’ve chosen. It is the actual nuts and bolts of the experience that you want your players to go through.” Adding a story, a theme or a scenario to a gamification could have a major impact on the other

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elements of the whole gamification procedure. As such, it is convenient that the dynamics and mechanics of the game are closely related to the storyline chosen. The tension, the conflict, the challenges or the characters generate emotions in the students and thus make the experience immersive and, consequently, more memorable. Listening to stories means the user will relate these stories to things they have experienced themselves, making new connections [14]. Narratives usually make engagement easier and longer-lasting. According to Keller [16] “what we learn from games is that adding narrative, storyline, a theme, or fun graphics to our lessons and activities can help students be more engaged.”

Stories help us to organize and remember information and tie content together in a coherent way. Designing gamification as a series of narrative experiences means you can design the emotional journey you would like your participant to go on [14]. Adding stories to learning programs allows teachers to connect to the learners on an emotional level. Moreover, a story is the perfect way to introduce an element of playfulness. This narrative layer opens up opportunities for being creative and could take learners to a higher motivational level, a level to get them “hooked” on the storyline as if it were a book, a film or a TV series.

Storytelling is one of the most enjoyable and effective pedagogical techniques in the development of language skills in one's first language, and also in the acquisition of a foreign or second language [18]. Digital storytelling specifically has become a way to motivate students to use the language both inside and outside the classroom [25]. Narratives have always helped teachers to contextualise language use in a meaningful way since they prompt learners to do something meaningful with the language they are meant to learn [28]. In this sense, there is a long tradition in second language pedagogy of using role play and simulations [4] [17] as a way to set up scenarios where learners taking on roles can practise their language skills and, at the same time, gain an understanding of socio-cultural aspects of the language they are learning. Reinhardt [28] underlines that “game-informed L2 instruction recognizes the power of contextualization, but takes it further and, wherever possible, situates the language in narrative and goal-directed behavior. [...] An activity, lesson, unit, or curriculum may be thematically structured

around a narrative or set of narratives in which the learners are immersed and invited to narrativize".

Bearing all these concepts in mind, the study presented in this paper attempts to describe how 29 foreign language teachers developed their gamified didactic interventions in relation to the selected narrative. Therefore, this study has the following aims: to identify the type of narratives that the teachers chose for their GDIs; and to analyse their features so as to understand the affordances of the narrative in gamified language teaching.

THEORETICAL FRAMEWORK

Stories have always been linked to the field of education. Long before pedagogy, orality was the medium through which traditional fundamental knowledge was transmitted, and stories or parables were the main way of conveying this knowledge [5]. Likewise, popular culture has been passed down to new generations through narratives (for instance stories, myths, legends, movies and novels). It is, in essence, an element that is used to contextualize information: "Narratives, like stories, function as cognitive frameworks that contextualize new knowledge because some of the story elements are familiar" [34].

Within a classic conception, the narrative is defined like as a text characterized by representing a succession of actions over time [35]. Succession implies progress from an initial situation to a different final situation, a new state. This progression establishes what is meant by story: "From a pragmatic point of view, the narrative must contain an element of intrigue that structures and gives meaning to the actions and events that take place over time." [21]. Todorov [35] asserts that the narrative sequence is constructed from five stages:

1. A state of equilibrium. A specific space and time is presented, along with the characters and the background of the action;
2. A disruption of that order by an event. A progression of incidents and episodes that entangle the action and maintain the intrigue is established;
3. A recognition that the disorder has occurred. There is recognition of the event that disturbed the equilibrium;
4. An attempt to repair the damage incurred during the disruption;
5. A return or restoration of a NEW equilibrium. A new state is shown, resulting from the actions taken and the outcome itself.

Therefore, the main requirement in such a story is that there must be a change of state prompted by a causal relationship within a certain period of time.

There are diverse narrative patterns on how to develop a story such as the ones introduced by Vonnegut's concept of the universal shapes of stories [7]. Many narratives are characterized by following a pattern in which the story progresses from the monomyth or the Hero's Journey [2]. This idea focuses primarily on raising a problem that the

hero must overcome throughout an adventure, subsequently coming home changed or transformed. This journey is the metaphor of the evolution of the character in the narrated story. The hero becomes the backbone of the narrative on account of the vicissitudes through which he has to go. When designing stories in gamification scenarios Marczewski [20] prefers to apply a simple variation of this pattern, called the Soap Hero's Journey (as it is popular in soap operas), which implies the following of 4 or 5 phases: the Calling, the Challenge, the Transformation, (the Twist, an optional stage) and the Resolution. In addition, the user's journey can even be condensed into 3 stages [23]: the Call, the Initiation and the Return. Nonetheless, Gomez [9] points out that the classic hero's journey structure is no longer useful since most narratives in the real world today are collective ones. In such journeys the protagonist is one member of a collective, the challenge can be huge or pervasive, there are multiple perspectives and shifting viewpoints, there is strength in diversity, and mentorships are distributed. In these collective journey narratives everybody wins as they are able to move forward due to their capacity for cooperation.

Some storylines in gamifications are imported directly from successful video games [37]. "The difference between stories for games and stories for movies is that games are, by definition, interactive. They don't have "viewers," they have "players," and players play an active role." [11]. In a game, stories must be interactive [33]; they are not only to be heard, read or seen. The player should have a sense of agency [14], take an active role and be at the centre of the story. Regarding interactive narratives, Marczewski [20] talks about the concept of the *narrative atom*, narrative units that can stand alone in a storyline. In non-linear branching narratives, as found in many video games, "each narrative atom must be able to hold its own without the need for every other atom to support it". Each atom should have its own start, middle and end so the player can jump in and out of them depending on the choices made. The key factor in interactive narratives is to make sure that every choice feels like it has meaning. Narrative choice architecture, either real or fake, should be built carefully so as to ensure that players' decisions have some effect on the outcome [19].

Sailer et al. [32] show that narratives, avatars and the fact of working in groups and having teammates "affect experiences of social relatedness" and give meaning to gamification beyond the mere search for points, badges and a better position in some classification. In this sense, Ruhi [31] considers that making a creative narrative context can help participants to be more motivated when participating in a gamified action. Narratives, moreover, can be constructed from a range of possibilities, from the most complete fictional universe to a contextualization in the real world. According to Sailer et al. [32], this "can enrich boring, barely stimulating contexts, and, consequently, inspire and motivate players and particularly if the story is

in line with their personal interests". Stories help participants to be involved in the activities [30] and help them to consider their own actions within gamified activities as more meaningful. However, Nicholson [24] is cautious in recommending the implementation of *fantasy/fantastical narratives* since players are placed outside the real world, but finds the employment of *analogy* useful as it may provide richness that the real-world setting does not. Gamification narratives may use metaphors as a tool [23] since it is "a powerful hook for our imaginations to latch on to and is an efficient way to promote the trigger for a (new) behavior".

Ruhi [31] proposes three types of narratives, which are used as a single layer of gamification: integrated narratives, emerging narratives and interpreted narratives. The different narratives are related to the different elements of gamification. The *integrated narratives* are related to the mechanics and are those proposed by the designer of the gamified action. The *emerging narratives* are related to the dynamics and actions of the players-participants: "they are created by players during their interaction with the gamification application in a dynamic fashion as they perform different activities" [31]. Finally, *interpreted narratives* are related to aesthetics, understood as "the desirable emotional responses evoked in the users when they interact with the gamified system" [31]. According to Ruhi, a successful gamified experience must show coherence between the three types of narratives, that is, the designer's proposal is the one that the players both develop and, at the same time, experience in a personal way as they participate in the gamified experience.

In storytelling, genre plays a determining role. According to van der Meer [22], genre is a potent tool which creates a scaffold for concepts, contexts and rules which can be placed on a narrative foundation, helping to connect the story with the player. Thus, if a recognisable genre is added to the narrative it will deepen that connection even further. Genre gives participants a recognisable, somewhat universal basis, which can then be transformed into a different world with different rules, cultures, and customs.

Reiners, Wood & Dron [29] define narrative as: "unique paths through the story which also enliven the story and "unfold in space" and support the process of understanding and building cognitive structures. Narratives are either pre-scribed (ready to reveal their sequences of milestones and activities over and over again), or use exploration and goal-oriented triggers to multiply the possible narratives that learners can indirectly choose from." The scope of the narrative must be suitably wide for learners to engage a sense of curiosity and develop motivation for learning,

METHODOLOGY

This study has been carried out within a continuing professional development course about gamification called Gamelex at the IDP-ICE in the University of Barcelona [1] [27], which was devised to research gamification issues in

language education. The course was delivered in a blended-learning format in two phases. The first one was a five-week online gamified program in which trainees received input on gamification in a foreign language education context. In the second phase, trainees had five months, with the help of a course tutor, to plan, design and implement their own gamified didactic interventions (GDIs) for their respective groups of students. Trainees designed their GDIs according to their educational contexts taking into account their students' needs. They were in-service foreign language teachers working in the EOI language schools in Catalonia (Spain), teaching English, French, Italian, German and Russian, all of them with ample language teaching experience but none in gamification.

In a previous study Batlle & González [1] identified two types of narrative, one that includes stories, and another that merely sets up imaginary scenarios to contextualise the learning tasks. The aim of this study is to go deeper into this concept to provide an answer to the following research question: What features emerge from the GDIs that can be seen to characterize these two types of gamification narrative? The answer to this question will provide relevant information on how language teachers are able to integrate gamification narratives into their teaching and which elements they use to develop them.

Data in this study consists of 29 GDIs, their lesson plans, teaching materials and presentations of their interventions, collected from participants in two different editions of the Gamelex course: 2016-17 and 2017-18. The analysis carried out followed a descriptive-interpretative approach that consisted of the following stages. Firstly, six areas of analysis were identified: type of narrative, genre, plot, avatar or roleplaying, visual aesthetics, and duration of the GDIs. Secondly, an exhaustive revision of GDIs was carried out in order to be able to determine which characteristics of the narratives were present. This qualitative analysis for each area was carried out by the researchers independently, with results being compared later and any disagreements being discussed jointly so as to achieve inter-rater agreement and thus to ensure a higher reliability of the results. Finally, both researchers analysed the GDIs to identify patterns or trends in the narratives combining the features of all the areas.

RESULTS

The results of the analysis will be presented in the same order as has been followed in the analysis of the data. Firstly, the type of narratives will be described in two categories: stories / scenarios; then the data related to the other areas will be presented in the following order: the genre the GDIs were based on, the plot they followed and the duration of the GDIs, then the roleplaying of the participants in the gamified tasks, and finally the degree of visual aesthetics applied in their gamified designs.

Stories and scenarios

The value of analysing which elements form the core of gamification narratives comes from the importance of the narratives that contextualize new content and new teaching objectives [34] [6] [29]. This is even more relevant in the context of teaching foreign languages, in which learning is contextualised in such a way that language teachers try to help students live out communicative experiences similar to those that they could experience outside the classroom. This implies that the stories or scenarios not only contextualize the learning experience, but they also contextualize it through themes that are close to the students' reality, from their own experiences or from the socio-cultural reality of the countries in which the target language is spoken.

The analysed narratives of the 29 GDIs fall into three categories (number of GDIs is indicated at the end of each category and an example provided):

- a) A first category consisting of narratives that develop **stories**, in which the basic narrative stages of beginning, development and resolution are present, and which culminate when the learning objectives are achieved. (13 GDIs)

Example: *GDI24 focused on the struggle of mafia clans to take control of different areas of Sicily. The goal was to get the maximum number of areas for each of the clans, which prompted students to perform language tasks in exchange for coins to buy more areas, bribe the police, etc.*

- b) A second category in which **scenarios** are set up to contextualize the gamified didactic experience. These scenarios are characterized by not having introduced clearly the basic triadic stages of a story from the point of view of narratology. What they offer is a static scenario in which events unfold. This type of narrative is usually the same as the typical gamified tasks that imitate or reproduce contests or quizzes. (14 GDIs)
Example: *In GDI14 students had to participate in a contest that followed the idea of the TV show Masterchef. The goal was to get as many points as possible by going through 3 tests consisting of a simulation of "cooking" 3 different dishes.*

- c) A third category in which the narratives are constructed from a **succession of scenarios**. In this group there are GDIs that have trips to different destinations as the backbone of the narrative. In each of the destinations, students seek some information but the tasks done in one destination are repeated in the following destination, so that there is no progression of a story. (2 GDIs)

Example: *If we look at GDI29, the students have to collect information about the different countries that make up the Francophonie. The same tests are proposed for each of the countries, so each of the groups worked through similar tasks in a different scenario. In each of the places, each group develops*

their own narrative, which is repeated, and the sum of all of them provides them with the solution to the challenge posed.

Genre

"Genre is an overall categorization of a semiotic domain where narrative can take place" [24]. In addition, genres help to identify the students with the story from the moment they can recognize it thanks to their previous experiences [24]. In the narratives of the GDIs there are different genres depending on whether they are designed around a story or a scenario. These varied genres can be summarized as follows (ordered from highest to lowest frequency in each type group):

Genre in stories

Socio-cultural genres: in this group we have 13 GDIs that are based on topics related to culture, such as art or cinema, with popular culture represented by some GDIs dealing with customs and traditions. The importance of sociocultural issues lies in the fact that these are a key component of communicative competence [12] that students of foreign languages usually work on in the language class in order to acquire the necessary skills to communicate in the target language. There are five genre types which these GDIs are based on: i) Art, customs and traditions of the countries in which the language is spoken (6 GDIs); ii) Novels, cinema or TV series (4 GDIs); iii) Famous people (1 GDI); iv) Serious games (1 GDI) and v) an initiative journey (1 GDI).

Genre in scenarios

In this group of 16 GDIs there is also a variety of genres: 7 GDIs dealt also with socio-cultural genres based on art, customs and traditions of countries. For example, *GDI17 celebrated 100 years of Russian cinema, while in GDI25 students were trying to recover lost art.* There is also 1 GDI in which a scenario is created around a famous person. In this group, two different genres from those found in the story group are identified: 4 GDIs explored the knowledge of the participants regarding customs and habits and another 4 GDIs were based on scenarios related to TV quizzes. All of the GDIs coincide in starting from well-known products easily recognizable to the participating students. This recognition is a feature that seems to facilitate entering smoothly into the narrative storyline and the students' enjoyment thereof.

Plot: Contextualisation or Storyline

The 16 narratives that set up a scenario described an imaginary context where the learning tasks took place and no storyline is developed. They create only a situation, sometimes simulating real life experiences. However, within the 13 GDIs that included a story, two types of plot were identified, according to their storyline complexity:

- a unique linear plot, in which a sequential storyline is followed and no complications or twists are encountered (10 GDI). Example, *in GDI13 the students had to prepare a project to redesign the*

Trans-Siberian journey, all the actions that they carried out were geared towards that final goal.

- a complex linear plot in which a sequential storyline is also followed, but there is more than one puzzle or challenge to overcome in various narrative threads (3 GDIs). Example: *In GDI16, based on the film series "The Hunger Games", the students are divided into different districts and have to interact with each other in order to free them from the problem they have (they lost their memory). In addition to this common and final goal, other specific objectives in the storyline emerge such as identifying the infiltrators or preparing a trip to gain the favour of the smuggler.*

The type of plot that does not appear in our data corpus is that of a branching storyline, typical of a videogame.

Duration

The length of time of the GDIs is also analysed to find out if this factor has implications for how trainees managed to integrate the narrative. Three groups can be established: those that were developed in a single class session (3 GDIs), those that were developed in several sessions close together in time (12 GDIs) and those that took place over a more prolonged period of time (14 GDIs).

The GDIs with only one session are characterized by an intensive session in which the storyline does not have time to become complex.

From the fourteen GDIs with more sessions two subgroups emerge:

- few full sessions over time (7 GDIs). Example: GDI15 (*4 sessions in 4 weeks*) GDI20 (*4 sessions in 2 months*), GDI22 (*6 sessions in a month*), GDI25 (*3 sessions in 1 month*), GDI26 (*4 sessions in 2 months*), GDI27 (*3 activities in 2 months*), GDI8 (*5 sessions in 4 months*).

GDI26 took place over 2 months, during which time the students concentrated their tasks on written expression, reading comprehension and audiovisual understanding, but the actual gamification consisted of 4 sessions. In-between the teaching sessions, students had the chance to carry out activities of a certain degree of complexity.

- small parts of sessions repeated over time (7 GDIs) Example: GDI3 (*over the course of 3 months*), GDI17 (*8 weeks*), GDI9 (*4 months*), GDI11 (*4 months*), GDI18 (*3 months*), GDI19 (*3 months*), GDI29 (*4 months*).

GDI3 took place over 3 months, during which time the activities (video selection, audiovisual comprehension, etc.) were being carried out during class time and also outside the class. This extensive GDI was developed with enough time for the students to receive feedback, to review their own activities, to deliver them, to receive their reward, and also to carry out other activities.

Those GDIs that covered up to 6 sessions but that did not exceed two months were characterized by leaving some time in each class session to do activities related to the gamified experience.

Roleplaying

Learners could take another identity in the GDIs as most were assigned a role to play, a typical feature of some gamifications. However, these roles cannot be considered as avatars since they do not receive any particular personality traits. There are two groups of roleplaying identified in the data: in 12 GDIs the teacher assigned one role to learners and in 17 more than one role was assigned. From the first group some differences can be established: there are 6 GDIs that consider the group of students as simply being themselves, not taking on a special role beyond the role of being a player. Example: *In GDI10, the students participate in a game that imitates the competition of the film Oscars in which they have to demonstrate their knowledge about cinema.*

In the second group there are another 6 GDIs which assigned a role linked to the narrative. It should be noted how these role plays have been integrated into the narrative through learners having to assume the peculiarities of the assigned roles and to act in accordance with the underlying story. Examples: *Students played the role of travellers in two GDIs and in the other GDIs the role of experts, walkers, cooks, and volunteers to work on the farm.*

Regarding the second group, in which the teacher assigned different roles to the learners, two more groups are identified, the GDIs with 2 roles and those with 3 or more. The 3 GDIs with two roles are characterized by one of them being the leader of the group (such as in GDI3, the captain) and the rest of the group assuming the same role (guardians).

13 GDIs that include 3 or more roles are characterized by each of the participants having to assume the features of their roles in the context of a group. From the didactic perspective, this is a beneficial feature because students must clearly form collaborative groups of as many participants as there are roles in the group [32]. Some examples: *In GDI2 there were 4 roles: "Commissaire de Police", "Officier de Police", "Ingénieur de la Police Technique et Scientifique" and "Technique de la Police Technique et Scientifique"; or in GDI25, each student in groups of three was an expert in a different art.*

There are also 2 GDIs that are halfway between the types described above. In those cases, teachers divided the class into groups and assigned a generic role. For instance: *In GDI24 the class was divided into 3 groups and each of the groups belonged to a different mafia clan, and in GDI16 students in groups were inhabitants of different German Federal States.*

Finally, there is one unique case in GDI19 as there were 5 roles assigned in a diverse way. In groups of three, students

were assigned the following roles: *mission coordinator, communications & IT expert* and *linguistic expert*. The same roles were assigned for each group. However, there was also a *murderer* and a *secret link* in the class group.

To sum up, roleplaying is a key feature in the gamification narratives in our data and is closely related to the concepts of cooperation and competitiveness. There are those GDIs that included roles either individually or in groups in order to compete with each other, or those in which teachers assigned individual roles in groups who had to cooperate so as to achieve their gamified learning objectives.

Visual aesthetics and design

The aesthetics of the design is also a relevant feature to help enhance the narrative and it was therefore evaluated qualitatively to see the degree to which it was incorporated in the different GDIs. The elements to be considered in shaping this visual aesthetic construct include: drawings, designs, visual details related to the themes incorporated in some gamifications into points, badges or leaderboards (PBL), the logos in the teaching/learning material, posters, infographics or even in some cases, t-shirts the participants have created to identify their groups; even, on a few occasions, some scenography and decorations which were used to set the atmosphere of the gamification theme.

These elements were incorporated unevenly in each of the GDIs so their value as a cohesive element of the gamifications is also unequal. In that respect, a simple Likert scale of three points was defined: 1, a minimal presence of visual aesthetic elements; 2, little presence but limited to the PBL and some elements of the teacher's presentation material; and 3, high presence in many gamification elements.

In the data there were 13 teachers who, even having incorporated some elements, did not take advantage of the design elements to reinforce the narratives, 10 teachers who tried to take advantage of these elements to a greater extent, and finally 6 who made the most of the aesthetic elements to enhance and give greater coherence to their narratives.

From the latter group, GTI27 stands out because all the elements used were aesthetically marked by the design, enhancing the narrative: *the letter found that set up the story, the bloodstains on the wall, the use of only three colours in the whole GDI (white, black and red) and the original typography of the murder case based on the movie poster, an email account created for the occasion through which the teacher communicated with the detectives (students), etc.*

Before discussing the main issues of the results, we would like to point out that the analysis of the PBL elements in relation to the narrative was carried out but no relevant differences stood out as all the GDIs in some way or another integrated these components into their narratives. However, in six occasions they were highly pertinent in their aesthetic design and the teacher took this aesthetic

feature into account in a serious way. Example: *In GDI16, the leaderboard took the form of the map of Germany by graphically differentiating the different states that participate in the game. On this map the students had to move on earning points (currency created for the game) and badges (especially designed) won by each of the teams.*

DISCUSSION

As far as the narratives in our data are concerned, not all the GDIs clearly presented the three basic classic narrative stages: beginning, development and conclusion [35], but most presented scenarios that contextualized the GDIs and did not develop a story. Similarly, the idea of the hero as the main protagonist [2] was surpassed [20] [23] and a collective character in many of our cases was the main protagonist [9]. This is not a surprising result as collaboration in performing language tasks is quite common in language learning and teaching. Moreover, all the GDIs of the corpus are in the group of integrated narratives [31], incorporating mechanics such as competition, feedback or turns. In addition, we can also affirm that all can be characterized as emerging gamifications, although in different degrees. This is so because although they all contain a narrative, depending on the type of narrative we can see differences in terms of progression.

Narratives based on a story have a clear progression in the storyline, to reach a clearly stated objective; on the other hand, in those based on scenarios an imaginary context is set up without a narrative moving forward. However, in some cases there was a combination of scenarios designed to give the sense of progression. This idea reminds us of the concept of the narrative atom [20] where each atom has identity of its own and can be connected to form a storyline. Nonetheless, both types of narrative, stories and scenarios, attempt to reproduce known worlds or establish analogies with the real world which usually enrich the gamified experience [25]. If we then focus on the interpreted narratives, the same thing happened as the role of the player allowed students to adopt an active role towards the narrative and to create their own experiences [11] usually participating in a sort of interactive story [33]. The intention was for students in all the GDIs to have a sense of agency [13].

The predominant genre of the narrative was a sociocultural one, as an understanding of this realm forms an integral part in developing the communicative competence [12] that provides students with a more nuanced approach to the target language. In most GDIs the underlying genre was related to the language world in that it showed the target culture, traditions, customs, and even everyday situations. Fewer GDIs, in comparison, based their narratives on genres such as adventure, thrillers, etc.

In terms of the duration of the GDIs, we can only speak of trends according to our data: the implementation of gamifications in an intensive way seems to correspond to the sequence of a story with a complex linear plot (GDI16

and GDI24). The group with a longer period of time led to less complex storylines, as counter-intuitive as this may initially seem. Looking at GDI16 and GDI24, these were intensive experiences, carrying out their tasks in one month. In our data there are only three GDIs (GDI9, GDI16, GDI24) that are characterised, predominantly, by having a narrative based on a story, with a complex plot that favours the progression of said story, with roles that in most cases have to form teams that encourage cooperative work. And there are also three other GDIs with a story with a simple plot (GDI13, GDI27 and GDI29), which contain different gamification features that enhance the narratives (visual aesthetics, roles, plot).

CONCLUSION

This paper has described a study dealing with the narratives of 29 GDIs devised by foreign language teachers and has identified different features that enhance those narratives. The predominant narrative in our data is based on the setting up of scenarios, followed by those narratives that develop a story with a simple linear plot. In these narratives, teachers assigned students roles that allowed them to participate actively in the gamified tasks in a roleplaying mode. Most of the aesthetics and appeal elements in the gamified designs have been integrated through the PBL, and a few also in the rest of the working material (handouts, posters, etc.). The scenarios focused mainly on sociocultural aspects, followed by those centred on the traditions and habits of the students. Both types were fully consistent with the context of foreign language education in which students commonly have to acquire communicative competence that includes the sociocultural aspects of the language they are learning.

The duration of our GDIs marks a trend that shows that the lengthier GDIs seem to have been able to develop a more complex narrative compared to those that were carried out over several months but with few sessions. This is probably reasonable as it is difficult to maintain the narrative tension of a story over a long period of time.

To conclude, although most teachers opted for scenarios instead of stories, narratives with a story as the backbone of the teaching sequence provided more opportunities for teachers to integrate gamification elements into their teaching tasks in a coherent way.

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REFERENCES

1. Jaume Batlle y Vicenta González. 2017. Análisis de secuencias didácticas gamificadas para la enseñanza de lenguas extranjeras: La importancia de la narrativa en la gamificación. *Actas del V Congreso Internacional de Videojuegos y Educación CIVE'17* https://riull.ull.es/xmlui/bitstream/handle/915/6640/CI VE17_paper_4.pdf?sequence=1&isAllowed=y
2. Joseph Campbell. 1949. *El héroe de las mil caras. Psicoanálisis del mito*. Fondo de cultura económica, México
3. Aaron Chia Yuan Hung. 2017. A Critique and Defense of Gamification, *Journal of Interactive Online Learning*, vol.15, 1. <http://www.ncolr.org/jiol/issues/pdf/15.1.4.pdf>
4. David Crookall, & Rebbecca L. Oxford. 1990. *Simulation, Gaming, and Language Learning*. New York: Newbury House
5. Olga Cruz. 2013. Relatos digitales en la clase de ELE: una propuesta para el aprendizaje significativo en un entorno multimodal. In *Experiencias con el relato digital*, C. Gregori Signes and M. Alcantud-Díaz. Universitat JMP Ediciones, Valencia, Spain, 2013.
6. Richard Donato,& Bonnie Adair-Hauck,. 2016. PACE: A Story-Based Approach for Dialogic Inquiry about Form and Meaning. In *Teacher's handbook: Contextualized foreign language instruction* (5th ed.), J. Shrum & E. Glisan (authors) Cengage Learning: Boston, MA, 206 – 230.
7. Jon Fusco. 2016. The 6 Emotional Arcs of Storytelling, Why You Should Use Them, and Which One is Best <https://nofilmschool.com/2016/11/emotional-arcs-6-storytelling-kurt-vonnegut>
8. Ole Goethe. 2019. *Gamification Mindset*, Ed. Springer International Publishing
9. Jeff Gomez. 2017. The Hero's Journey is no longer serving us, *Gamification Europe, 2017*
10. Jaroslaw Grobelny, Joanna Smierzchalska, Krzysztof Czapkowski. 2018. Narrative Gamification as a Method of Increasing Sales Performance: A Field Experimental Study. *International Journal of Academic Research in Business and Social Sciences*, 8(3), 430–447. DOI: 10.6007/IJARBSS/v8-i3/3940
11. Tobias Heussner, Toiya Finley, Jennifer Brandes Hepler, Ann Lema. 2015. *The Game Narrative Toolbox* (Focal Press Game Design Workshops), Routledge.
12. Dell H. Hymes. 1972. On Communicative Competence. In *Sociolinguistics: selected readings*, J.B. Pride and J. Holmes, Penguin: Harmondsworth, UK, 269–293.
13. Melinda Jacobs. 2017. Game mechanics SUCK without narrative, *Gamification Europe, 2017*. <https://gamification-europe.com/melinda-jacobs-conference/>

14. Melinda Jacobs. 2018. UX & Gamification: The Big Picture, *Gamification Europe 2018*, <https://www.slideshare.net/gamificationeurope/ux-gamification-the-big-picture-melinda-jacobs>
15. Karl M. Kapp. 2013. *The Gamification of Learning and Instruction Fieldbook: Ideas into Practice*, John Wiley, San Francisco
16. Alice Keeler. 2015. Gamification: Engaging Students with Narrative. <https://www.edutopia.org/blog/gamification-engaging-students-with-narrative-alice-keeler>
17. Glenn, S. Levine. 2004. Global Simulation: A Student-Centered, Task-Based Format for Intermediate Foreign Language Courses. *Foreign Language Annals*, 37(1), 26–36. DOI: 10.1111/j.1944-9720.2004.tb02170.x
18. Claudio R. Lucarevschi. 2016. The role of storytelling on language learning: A literature review. *Working Papers of the Linguistics Circle of the University of Victoria* 26(1), 23–44 <https://journals.uvic.ca/index.php/WPLC/article/view/15309/6820>
19. Andrzej Marczewski. 2016. Narrative Choice Architecture and Gamification <https://www.gamified.uk/2016/07/04/choice-architecture-gamification/>
20. Andrzej Marczewski. 2017. Narrative Atoms and The Soap Hero's Journey <https://www.gamified.uk/2017/05/30/narrative-atoms-and-the-soap-heros-journey/>
21. Ernesto Martín Peris (coord.).2003. *Diccionario de Términos Clave de ELE*, Centro Virtual Cervantes, http://cvc.cervantes.es/obref/diccio_ele/
22. Albert van der Meer. 2017. Storytelling: The strength of metaphors when gamifying. <https://aestranger.com/metaphors-gamifying/>
23. Albert van der Meer. 2018. Game Tools: The power of purpose and narrative to engage your players <https://aestranger.com/game-tools-purpose-narrative/>
24. Albert van der Meer. 2019. Connecting players and narratives with a genre. <http://aestranger.com/connecting-players-and-narrative-with-a-genre/>
25. Scott Nicholson. 2015. A RECIPE for meaningful gamification. In *Gamification in education and business*, T. Reiners and L. A. Wood (Eds.), Springer, New York, NY, 1-20.
26. Hayo Reinders. 2011. Digital Storytelling in the Foreign Language Classroom, *ELTWO Journal*, 3.
27. Joan-Tomàs Pujolà, Andrea Berriós, Christine Appel. 2017. Applying DMC in a gamified teacher course on gamification. *V Congreso Internacional de Videojuegos y Educación CIVE 17* Retrieved June 21, 2019 from <https://riull.ull.es/xmlui/handle/915/4769>
28. Jonathon Reinhardt. 2019. *Gameful Second and Foreign Language Teaching and Learning Theory, Research, and Practice*, London, Palgrave Macmillan
29. Torsten Reiners, Lincoln C. Wood, Jon Dron. 2014. From Chaos Towards Sense: A Learner-Centric Narrative Virtual Learning Space. In: *Gamification for Human Factors Integration: Social, Education, and Psychological Issues*, Bishop, J. (Ed.) IGI Global Hershey, PA, 242-258.
30. Scott Rigby, Richard M. Ryan. 2011. *Glued to Games: How video Games Draw Us Spellbound*, Oxford, PRAEGER
31. Umar Ruhi. 2015. Level Up Your Strategy: Towards a Descriptive Framework for Meaningful Enterprise Gamification, *Technology Innovation Management Review*, 5(8): 5-16. DOI: <http://doi.org/10.22215/timreview/918>
32. Michael Sailer, Jan U. Hense, Sarah K. Mayr, Heinz Mandl. 2017. How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction, *Computers in Human Behavior*, 19: 371-380. DOI: <https://doi.org/10.1016/j.chb.2016.12.033>
33. Chris Solarski. 2017. *Interactive Stories and Video Game Art: A Storytelling Framework for Game Design*, London. Taylor & Francis group
34. Julie Sykes and Jonathon Reinhardt. 2013. *Language at Play. Digital Games in Second and Foreign Language Teaching and Learning*. Boston (MA): Pearson.
35. Tzvetan Todorov. 1969. *Grammaire du Decameron*, The Hague, Mouton.
36. Kevin Werbach, Dan Hunter. 2012. *For the Win: How Game Thinking Can Revolutionize Your Business*. Philadelphia: Wharton Digital Press.
37. Lincoln C. Wood and Torsten Reiners .2015. Gamification. In *Encyclopedia of Information Science and Technology* (3rd ed), M. Khosrow-Pour (Ed.), Information Science Reference, Hershey, PA: 3039-3047. DOI:10.4018/978-1-4666-5888-2.ch297