International Conference Democracy and Participation in the 21st Century Lisboa, 12-15 July 2017

Innovation, Digitalization and Participation Gamification strategies for non-profit advocacy

Games for citizen participation

Marco Meloni & Sofia Antunes*

Abstract

One of the emerging trends in the field of public participation is *gamification*. Participatory processes increasingly apply strategies and dynamics borrowed from games to promote a more diverse demographic of engagement and to incentivize desirable behaviour by the participants. While many scholars and practitioners highlight the practical benefits of gamification, other warn us of the potential risks of the *ludification* of public participation, especially if applied in a learning context. Under which conditions would game-like dynamics enhance public participation? What are the democratic risks of gamification applied to public participation in context of education, using a large multi-site simulation based on the Empaville platform. The activities involved around 200 students from the ages of 10 to 18, in five different Portuguese schools. The role play-game simulated a gamified participatory budgeting process integrating in-person deliberation with digital voting. Using a mixed method approach that combines the analysis of the game patterns, surveys and participant observation, the paper explores under what conditions gamification can activate a "virtuous circle" that promotes participants' autonomy and empowerment from a school age.

Key terms: Gamification, democratic innovations, e-democracy, participatory democracy, participatory budgeting.

^{*} marcomeloni@ces.uc.pt - sofiaantunes@ces.uc.pt

Introduction

The term *gamification* has roots in the digital media industry, particularly in the context of video games. Deterding (2014) defined it as the use of game design elements in non-game contexts. This dynamic entails *gameful* elements such as: rules, competition, outcomes and conflict executed by the users towards an end goal. This allows users to be rewarded, paving the way for a revival in "playful desire behaviours and mindsets" (Deterding et al. 2011, pp. 9-15). Consequently, *gamification* aims to create a common space for an enjoyable user experience, expanding into something more than solely for entertainment purposes. This paper furthermore aims to highlight some perceptions reviewed in gaming literature. In particular, how *gamification* can foster and strengthen the common good and overall political participation. In this sense, Pateman (2012) argued that in the modernisation of politics citizens should not only be consumers, contrasting the Schumpeterian (1942) notion of democracy that saw "citizens as merely consumers in another guise". Gee (2003) transferred this concept by attaching the user in the role of developer instead of consumer, i.e. a co-creator of the gaming world that would also participate within it.

This paper will analyse *gamification* in the decision-making process of citizen participation, questioning if and how games can foster the direct interaction of citizens with governmental agencies alongside promoting community collaboration and direct action. The paper begins with the overall explanation of *gamification*, followed by a more specific section focusing on the relation between *gamification* and democracy. The third section frames *gamification* in the context of learning. The fourth examines the features of the role-playing game Empaville for School and it includes two sub-sections dedicated to the gamification elements and objectives of the simulation. The fifth analyses the activities carried out by the survey and participant observation. Finally, the conclusion highlights opportunities and challenges for future developments.

1. Explaining gamification

To better understand the concept of *gamification*, an analysis of the terminology in literature is fundamental. Caillois (2001) conceptualized *gamification* through two distinguishable fields: *ludus* (gaming) and *paidia* (playing), which entails the creation of a playing-space, which is more creative, open, probing and free. Despite this general definition, this paper aims to go beyond the intersecting and blurred conceptualization of *gamification*. The reflection of *gamification* as complement of playfulness (Deterding et al. 2011) paved the way to depict a space for a societal approach rather than a technical one. Under this perspective, *gamification* in terms of the context and demographic of users, should not be scrutinised as a "one size fits all" model.

The authors of this paper envisage *gamification* as a process that increases users' motivation and fun while encouraging them to come back to the game. Deterding (2011), Mahnic (2014) and Thiel (2016) defined this dynamic as engaging experience. This can be perceived through *interface design patterns* such as badges, levels, or leaderboards, that paly a valuable role towards community recognition, which may also include non-game contexts. Along these previous elements, Thiel (2016) also pointed out the role of the *status* that users can acquire by reaching certain levels of the game. Each achievement is recognized within the community, turning their engagement into social reward. Other game elements are included in *gamification*, such as feedback, challenges and competition among the leader boards, challenged by time constraints. All these elements drive the user to a more enjoyable and engaging experience. The success of *gamification* is intertwined with how much the users' interaction can be more appealing and rewarded, i.e. how they can be more motivated to maintain their engagement.

In conclusion, it is possible to recognize two sides of the behavioral motivation in the experience: one intrinsic and one extrinsic. Some authors such as Manhic (2014), Sanchez-Franco (2009), Thiel (2016) and Hassan (2017) pointed out that intrinsic motivations are consequently rooted around pleasure and amusement on performing the activity. The extrinsic motivations are translated by the mechanisms/elements that are rooted in the game design through a reward-based approach. Therefore, *gamification* will be successfully achieved if the emotional responses and its intrinsic positive effects can be balanced with the utilitarian extrinsic way of being motivated.

2. Gamification and democracy

This paper investigates to what extent public participation can be more enjoyable and how *gamification* can have a positive impact toward democracy. Some authors, such as, Pateman (2012) and Lerner (2014) pointed out the decrease of political participation and its risks. In particular, Lerner affirmed that the democracy "turning what once were social processes into individualized tasks with little human interaction" (p. 8). The possibility of participation has been diminished, transforming the decision-making process into becoming alienated from citizens, ruled and owned by elites. Taking this into consideration, *gamification* can be seen as a process to enhance democracy by promoting participation. In this perspective, as argued by Lerner (2014), games are inherently democratic as they invite the people to participate, implying deliberation and influencing the decision-making. Through deliberation it is possible to provide the concept of a *gamified democracy*, as they are intertwined concepts, starting from citizen sand democracy institutions.

Thiel (2016) categorized and analysed some e-participation platforms in order to examine to what extent deliberation can be promoted by a gamified democracy. The results reflected a very limited and narrow deliberation of the participatory projects. Indeed, the majority of these projects present a typology of participation rooted on citizen-sourcing and public deliberation.

The same author (2016) noticed a passive way of citizen engagement generally through deliberation limited to prescriptive agendas, already established. Even in public deliberation processes, citizen interaction among different parts was almost inexistent, despite being able put forward the topics that they were interested in. In that study it was identified that none of the processes analysed had developed a good channel of engagement and interaction. Although partial, this evaluation underlined some widespread limitations within this kind of platform. Firstly, administrators of the institutions and stakeholders tend to not be committed to giving feedback and interacting in the process. Secondly, generally only a small part of the citizens actively take part in the deliberation and decision-making process on the platforms. As it has been mentioned above, it is important to redefine *gamification* as a concept that largely should contribute to the common good. What are the advantages and challenges of integrating *gamification* in democracy?

Gaming promote the interaction between citizens and institution and enhance community building. Participants can experiment in real or simulated public decision-making processes and learn from them. Learning how to participate, citizens can overcome the perception of exclusion, gaining more confidence, while seeking to improve the public decisions' quality. Thus, citizens can have a more active role within democratic institutions. This will contribute to the empowerment of both the community and the individual, as well as for the overall public education. Moreover, *gamification* could also reduce costs of public engagement initiatives.

Gamification can also decrease citizen alienation from politics and society in general. Mahnic (2014) argued that through crowdsourcing, individuals could better perceive their role within the community, "outsourcing a job to the crowd", for the common good. Wikipedia is an illustrative example of how working for the community can provide effective involvement. Giving their contribution according to their own knowledge and skills, citizens take part in a broader policy-making life cycle. Macintosh (2004) described this cycle through five main stages. The first being is the agenda setting, where governments can engage with the citizens by defining how problems should be addressed and the related purpose. The second refers to analysis, where it is essential to gather information from all the involved citizens, civil society organizations and contexts where they develop a range of solutions. The third entails the creation of a policy, through formal consultation, and risk analysis for the plan implementation. The fourth

includes the regulation of the policy and eventually the creation of a more developed legislation. Lastly, the monitoring of the policy takes place, where citizens can review, suggest and propose amendments. By accomplishing the entire policy life cycle, citizens tend to be more empowered. Using Internet devices and gamification elements, e-empowerment can allow active participation raising proposals and influencing the political agenda in a bottom up perspective. Summing this up, citizens will not merely be consumers but the producers of a political frame.

Furthermore, part of the literature on this topic deeply focuses in the negative effects of *gamification* in public participation, particularly in terms of weakening citizens' autonomy and tokenism of the process. In this context, Mahnic (2014) argued that *gamification* is also a "slippery terrain", i.e. the "homo ludens" where a destructive culture is emerging, promoting a democratic way of living based on pleasure rather than on effort or social improvement. Moreover, it also suggests an environment based on "meritocracy" more than democracy. Under this perspective, *gamification* tends to encourage the users to spend their energy in the games, without questioning who established the rules or criticising the real socio-political system.

2.1 Diversification of solutions

Local governance has been a fruitful field to implement new ways of citizen engagement through using e-participation and *gamification*. Several public institutions that chose e-participation to develop citizen processes e.g. urban governance and budget planning have sustained this trend. The growth of these platforms has been largely sponsored by the municipalities, such as the participation platform of the Lisbon Municipality *Lisboa Participa*, and created new possibilities for participation. Bogost (2011) claimed that this tools won't be enough to satisfy and strengthen participation if all the intervenient stakeholders, citizens, civil servants do not cooperate and take part in the decision-making process. Macintosh (2004) by making use of the OECD report (2001) framed participation in different levels: information, consultation and active participation. The first level is driven by a one-way relationship, where the government is the information provider to the citizens. Consultation, aims to give leadership to the government by dictating the rules of participation among peers, where governments and citizens can assume a partnership of equal standing on decision making process. This latter one is considerable the most desirable one in a *gamification* and e-participation process.

3 Gamification in learning

The activities of Empaville for School are primarily targeted at young school students and the experiences analysed in this paper have taken place within a classroom context. Therefore, although the game can be defined as *gamification* of a public participation activity and the related research focuses on that topic, it interacts with learning. In recent years the academy has been questioning the possible relationship between *gamification* and learning, and this seems to be a significant innovative (yet marginal) research trend. Current scholars mostly focus on the analysis of the use of video games in a school context but has developed principles and reflections that can largely embrace also games that use technology in limited phases, as e.g. Empaville for School analysed in this paper.

Gaming as a learning tool is subject to a broad debate characterized by both praise and harsh criticisms. Its starting point is the critical evaluation of the traditional school system and, in particular, of the classroom-taught approach (Ramirez & Squire 2014). The main objections are based on hierarchy in the transmission of knowledge, from teacher to pupil in pre-elaborated and pre-schematized form. Acquisition of knowledge and competence is generally achieved through exchanging values rather than by experiences of action that generate pleasure, fun and fulfilment (Ramirez & Squire 2014). Gee (2005) defined learning as pleasurable basic drive for humans and affirmed that schools have destroyed this drive, instead it can be found currently in games. Moreover, the above-mentioned dynamic tends to favour the students that can link information to their previous experience, who generally are the fortunate ones who have a good cultural and social background, i.e. often a family that offers such opportunities (Ramirez & Squire 2014). Gaming is therefore proposed as a tool to overcome the critical features of the traditional school method and to revamp its role, effectiveness as well as fairness. The reasons illustrated by the supporters of this paradigm shift are primarily based on the following elements: fostering engagement and motivation, better interaction with content, providing feedback, structured problems, and learning through failure (Gee 2003). Gee (2003) stressed in particular the role of motivation as a learning process, which he considered essential for engagement and for maintaining concentration. He recognized games as a having a high motivational capacity in their widespread use in schools.

Larsen McClarty et al. (2012) summed up the empirical evidence on *gamification* in learning, with particular reference to digital gaming, in five points:

1. "Games are built on sound learning principles." Games can offer learning opportunities through simulations that prepare us for action in the real world. The consequences of the simulations are limited within the game, offering the player the possibility of gathering the educational elements of a failure without its negative consequences and by improving it through repetition. Furthermore, the game allows for immediate feedback and a constant and formative assessment processes. However, several researches reported the difficulty of transferring skills and contents out of the game. Skills seem to have more chances of being used externally, while content seems to have more resistance (Egenfeldt-Nielson 2007 in Larsen McClarty et al. 2012).

2. "Games provide personalized learning opportunities." The concept of tailor-made education is widespread and it is based on the personalization of learning tools, considering strengths & weaknesses of students, their interest and choices. On the one hand, this approach can allow a broad support for the student; on the other hand it can increase their autonomy and responsibility. There is, however, the risk of poorly interactive games that allow participants to only take limited choices or of games that are too hard for the participant, which in both cases may have an opposite effect than the desired one.

3. "Games provide more engagement for the learner." As analysed above, games easily engage students (Cahill 2007) and perhaps even more important they are able to "sustain engagement and motivation across time" (p. 13). The main debate on this issue relates to the elements which are key in promoting motivation and whether it is sufficient to acquire knowledge through the content or if "they tend to reinforce rote memory of low content rather than deep understanding" (p. 15).

4. "Games teach 21st century skills." As stated by Gee and Shaffer (2010):

Games require the kind of thinking that we need in the 21st Century because they use actual learning as the basis for assessment. They test not only current knowledge and skills, but also preparation for future learning. They measure 21st Century skills like collaboration, innovation, production, and design by tracking many different kinds of information about a student, over time (p. 3).

The criticality of this point is due to a widespread lack of recognition and evaluation of these abilities within the current education system.

5. "Games provide an environment for authentic and relevant assessment." Gaming is presented as a possible new evaluation system that can overcome the former one with in-depth & personalized analysis, regularity, and recognition of more varied and up-to-date skills. In addition, this type of assessment tends to be less invasive and generates less stress for the students.

According to Ramirez and Squire (2014), it is important to add in this list the concept of "projective identity", i.e. the possibility offered by games of playing another role in the class (or society) different from their own. In particular, in the game the participants do not need to act as "good students", they will play different identities that can open them to other behaviours and even allow them to rethink the roles. This dynamic can offer occasions for more democratic and free learning, as well as reveal students' skills and attitudes previously concealed.

All these elements explain the great interest of integrating games in learning context and the related ongoing process of gamification. In this regard, it is important to highlight the systematic elements of gamification in learning, considering it not as an isolated activity but rather as an ongoing process driven by a system of users, institutions and resources (Ramirez & Squire 2014). However, the application of gamification in learning has also been strongly criticized by a vast body of research. Bogost (2014: 2) argued that gamification "is primarily a practice of marketers and consultants who seek to construct and then exploit an opportunity for benefit". In particular, the suffix "-ification" marks this exploitation and distortion that Bogost (2014) considered unaware, i.e. the promoters and organizers don't understand the games and their potential. They seek to use the gamification power for economic benefit without questioning what the motivation is and the power of engagement generated and what effects it can have, especially in an educational context. Other analyses considered gamification as a symbol of late capitalism, which "captures how social institutions are restructuring themselves in a 'game-like' manner, acknowledging consumer agency (appropriate for an attention economy)" (Ramirez & Squire 2014: 25). Three of the main risks of gamification that are particularly important in education are: the exploitation of the "instinctive human reactions to basic stimuli" to strongly influence behaviours; the illusion of outcomes that often find difficulties in being transferred out of the game (Ramirez & Squire 2014: 25); and the gamification tendency to still be a "capitalist-driven Darwinian process of selection of the fittest" (Gee 2003).

4. Empaville for School

Empaville for School is a role-playing game that simulates a gamified Participatory Budgeting process for an imaginary park in the city of Empaville, integrating in-person deliberation with digital voting. Participatory Budgeting (PB) is a decision-making process in which citizens deliberate and directly decide how to spend part of a public budget (Sintomer, Herzberg, Röcke & Allegretti 2012). The game is based on real PB experiences, simplified and combined with *gamification* elements in order to provide an educational and critical experience on public participation. The game involves offline and online phases, allowing students to also use Information and Communication Technologies (ICT) adaptations to implement democratic processes. All the online phases of the game take place within the EMPATIA UX (User Experience) digital platform that technologically supports the process.

During the game the young participants are invited to discuss and elaborate project proposals to improve the imaginary park of the city of Empaville. The story-telling is developed using a video, which places the participants directly in the park and allows them to see the critical points, and through dialogue with a facilitator who impersonates the mayor of the city. After this stage, the *mayor* declares that, considering the needs that have become evident, a specific proportion of the public budget will be allocated for projects within the park. He/she explains that the projects will be decided democratically among the proposals that will be developed and presented by the participants. The participants are asked to prepare a flipchart for each proposal with cropped images, writings, and drawings in order to describe it by pointing out its main features e.g. proposers, target, proposal objectives, and approximate cost. The game is designed to generate conflict within and across the groups to showcase how a participatory process deals with conflicts.

The participants play divided in six different groups of Empaville citizens who frequently use the park according to cards distributed to each group before starting: lovers of traditional sports (football, volley and basket); skaters/roller derby (lovers of unconventional sports); dog owners (with environmental awareness); elderly residents; youngsters (who want to have fun and throw parties); and park staff and businessmen/women. Group cards are made with a layout similar to that of Facebook and provide information about the members for each group, i.e. age, gender, profession, profile friend (generally imaginary groups thematically linked to each other), like and dislike topics, and if they live near the park. These features outline the profiles that the participants will have to perform collectively throughout game, stimulating two gaming dynamics. At the individual level, participants are motivated to empathize with social actors that have different personal and social characteristics from their own. At the collective level, the game benefits from the dialogue between different groups, which each carry different interests that could potentially be in conflict. The entire game is based deeply on group dynamics, trying to stimulate co-design, collaboration, and co-decision. Each group is also asked to nominate one or two representatives for presenting their proposals to the plenary and to vote on behalf of the group, choosing between all the proposals panel. Each group can express three votes in total -- two positive and one negative.

The simulation ends with the announcement of the winning proposals and the awards ceremony. Afterwards, the debriefing takes place, giving the opportunity to examine the process from outside the game. This is important to highlight critical issues and offer an opportunity to explain the game dynamics and to transform it into a tool for consideration.

The number of participants can vary from a minimum of 18 to a maximum (currently) of 90 young people, from 8 to 18 years old. In each game session, a team of facilitators (generally between 3 and 5) guides the activity, in plenary and in the groups.

Empaville for School is a version of the more generally-targeted game Empaville specifically designed for young people. Empaville is the digital evolution of an offline game that was developed and refined over the course of sixteen years by Giovanni Allegretti and later by the UK PB Unit. This version of the game has been developed by the Center for Social Studies (CES) of the University of Coimbra (Portugal) with the support of the IT company OneSource within the consortium of the EMPATIA Project - Enabling Multichannel PArticipation Through ICT Adaptations, funded by Horizon 2020 EU programme, Call: ICT-2015/H2020-ICT-201, grant agreement n. 687920.

Using the game has offered interesting elements and data for research on *gamification*, exploring the advantages and disadvantages of *gamification* as applied to public participation, in particular with young people.

4.1. Game objectives

The Empaville for School role-playing game aims to foster a culture of public participation and familiarity with digital democracy in a fun way, providing critical tools to the young participants. In particular, the game seeks to reach the following objectives through *gamification* and direct experience:

- To stimulate the role of citizens as proactive actors in the community from the young age. This goal supports citizens' empowerment, which is a key element for a substantial and effective participation base.
- To empathize with other categories of the society, potentially different from the personal perspective. This highlights the complexity of social instances and promotes the importance of mutual respect within the community.
- To encourage collaboration in situations of conflict and to promote group work on public issues as an approach that is able to overcome the one-on-one dialogue with institutions.

- To analyse the role of games as a learning method for adults as well as for children. The application of *gamification* elements aims to promote critical learning through fun empirical experiences, without hindering its limits and potential risks.

4.2 Gamification elements within the game

Empaville for School covers the topic of democratic innovations (Smith 2009), with the simulation of a Participation Budgeting process. Moreover, the game is inspired by and critically employs the dynamics and analysis of *gamification*.

As has been analysed, in the recent years, *gamification* has emerged as an important trend in the field of public participation. Participatory processes frequently apply game dynamics to promote the engagement of a more diverse set of actors and to incentivize participants' behaviours. In particular, it is possible to frame the role-playing game Empaville for School in the cluster of "pervasive games," defined by Deterding (2014) as a game that can "take the substance of everyday life and weave it into narratives that layer additional meaning, depth, and interaction upon the real world" (p. 37).

Empaville for School uses *gamification* to create an attractive, fun, and participatory context within its activities, but also to analyse the *ludification* of democracy. The advantages and disadvantages of *gamification* applied to public participation are a central topic for the EMPATIA team and for its community. It is possible to identify the following main elements of gamification in Empaville for School:

- 1. Learning By Experience: through a fun and practical approach, participants quickly acquire higher and more durable skills than by texts or tutorials;
- 2. "Projective Identity" (Ramirez & Squire 2014): the role-playing game requires leaving their own identity and social role to impersonate a character; this encourages participants to leave their habitual learning context and offers them the opportunity to act with different behaviours.
- 3. Competition: even in the presence of a purely symbolic prize, the context of the game pushes the participants to engage in the competition, both as individuals and as a group (Khaled 2014).
- Time Pressure: in strictly reduced time, participants are pushed to focus on the problem and act. It is interesting to see how it can also lead to different decisions.
- 5. Story-telling: an accurate and engaging description of the context helps the participants to identify with the game on a personal level as to be involved in it.
- 6. Strategy: individual and group dynamics, competition, and prizes stimulate participants to develop gaming strategies.

5. Analysis of the activities

Empaville for School has been carried out within the activity of *CES goes to school* of the Centre for Social Study of Coimbra (PT) aimed to connect research to the territory, in particular public schools, for mutual growth and to contribute to the dissemination of knowledge in the areas of Social and Human Sciences by sharing the research developed and promoting the debate about it. EMPATIA team has embraced this project by cooperating with several schools from the 2nd and 3rd cycles of basic and secondary education located in the central region (Caldas da Rainha, Pereira, Coimbra) and north region (Porto) of Portugal. Empaville for School sessions took place in January and February 2017, involving students up 10 to 18 years old. The success of this project was not related with number of participants that it have reached, more than 200 students.

The sessions were continuously updated, both by including some specific contents to bridge the needs of each school and by adapting the discussion for each level of educational experience. Indeed, the research team followed a tailor-made approach considering the differences and needs of the contexts in order to better motivate the users and personalize the game experiences.

Different materials were used to develop the activities, such as computers, cards, flipcharts, clipboards, pencils, pens, images, photos, reviews and journals, and videos in order to both facilitate the game and foster the story-telling. Throughout the game, the rules and setting were explained gradually as to not overload the gamers and to stimulate the elements of curiosity and surprise. Students were encouraged to master every step of the game while the facilitator acted as *dynamizers*. In particular, the role of the mayor was prepared as almost a theatrical performance to project the participants into the situation. The students reacted to these dynamics by actively participating -- they felt engaged to the point of facing-off with the mayor, contradicting him/her and developing a form of counter-power.

The related research used a multimethod approach that combined the analysis of surveys distributed to the teachers and participant observation. Particularly for the qualitative approach, David Collier's concept of *process tracing* (2011) offered the framework to examine systematically the diagnostic evidence selected and analysed according to the research questions. Moreover, the continuous comparison between literature review and evidence that emerged in the activities led the analysis of similarities and differences between the two, thus linking the research to a wider academic debate. Lastly, the language used seeks to achieve a mediation between the academy and potential stakeholders, such as politicians and citizens, in order to be accessible to a wider audience.

5.1 Surveys analysis

The teachers' feedback was gathered by surveys distributed by email to all of the schools or conducted personally at the end of the sessions. In general terms teachers evaluated very positively the activity and expressed their satisfaction. They pointed out the efficacy of the *gamification* elements and stressed particularly the importance of the deliberative phase. Moreover, the teachers noticed that students who use to be shy or rowdy showed motivation and a will to participate in this activity. In some cases, some students even took a positive leadership for the first time. It was also said that Empaville for school had reduced some passive behaviors in the medium term. Nevertheless, the analysis of the surveys made it possible to notice profound differences in the evaluation of the teachers depending on the class levels involved, either the second cycle of primary school or secondary school.

The non-formal learning process resulted in a more challenging and enjoyable experience for the second cycle students. The game was considered a particularly useful method for students to develop different capabilities. The teachers highlighted the impact of the new activities, tools, and interactions in the stimulation of student engagement, autonomy, and a critical approach to reality. In particular, three elements of *gamification* were underline by this group of teachers, namely: playing roles, the discussion and presentation of proposals among their peers, and the time set provided for each task. One other important element mentioned by the teachers was the truly democratic discussion where students could raise their voices in the class on an equal grounds. In general, they noticed that the game captured the students' attention and raised their motivation.

In the secondary school, the feedback was slightly different. The teachers identified only a part of the *gamification* elements as positive inputs for the students. In particular, the discussion and presentation of proposals were the only elements widely praised by the teachers. This is mainly due to two factors. On the one hand, despite the fact that these students are almost adults, they have expressed reservations to participation and civic engagement as well as difficulties in elaborating proposals. This led teachers to focus their feedback on the deliberative phase. On the other hand, the engagement of teenagers now days probably needs a gamification with a high level of attractiveness and involvement that can compete with video-gaming and social networks.

In conclusion, all the teachers agreed that game can be part of the learning process and that proper gaming tools should be provide in the educational arena.

5.2 Participant observation

Each Empaville for School sessions lasted around 90 minutes, and therefore they cannot be defined as whole processes (although they have generated following discussion and analysis within the classes involved). Additionally, the alternation between offline and online phases gives only partially digital features. Nevertheless, the observation pointed out some of the main dynamics that tend to emerge in gamification, including some analysed predominantly in the videogames context, the cradle of this world. In the sessions, a team of trainers and researchers, including the authors of this paper, conducted a participant observation through which the following evidences emerged.

- The students involved have shown great curiosity and attention to the activity since the beginning. The key element at the initial stage was the "appeal of the new." The proposal of a game interrupted the normal class dynamics and the presence of new objects and unknown people in the school environment was symbolic of this craze. The teachers stayed in the classroom, but were invited to have an inactive role, as much possible, in order to not influence the participation.
- The behaviour of some students was very different from that which was normally assumed in class as reported by the teachers, in terms of leadership, proactivity, and concentration. The simulation fostered this dynamic according to the concept of "projective identity" (Ramirez and Squire 2014), i.e. playing a different character some participants could leave aside the role of "good/bad student" and felt comfortable to assumes different ones, as concerned citizens or social leaders.
- Involved students, included in elementary classes, have shown great familiarity in the use of technology devices used for activities. In particular, the use of the digital platform to support the game was characterized by curiosity and collaboration. It was possible to observe even a kind of impatience in the approach to technology that denotes a habit of rapidity and immediacy, a typical feature of the latest digital devices and programs.
 - Competition between groups in the game increased productivity and engagement, but only in the most active classes. Instead, it had little effect on less participative classes. Although clearly there were large differences at the individual level, this dynamics was predominantly collective. It is probable that the initial group attitude considerably affected it, in particular the interpretation of the activity as a game or just as a school task with the language of a game.

- The tasks with good level of action for the participants have been carried out with some difficulties, especially in terms of originality. In some of the sessions, this was evident especially in the design phase of the project proposals. For example, giving an original and explanatory title to the projects was much more demanding for the participants than organizers expected. However, when more guided, students expressed greater productivity and energy, but this way diminished the important element of autonomy.
- At the beginning of the game, two story-telling forms have been developed: the first by the projection of a video of the park and the second one by the active interaction with the mayor of the city supported by images and elements of theatre. Both were useful and complementary, but the active form proved to be the most effective and engaging, becoming a part of the game itself.
- All the sessions of the game ended with a debriefing at the conclusion of the simulation that attempted to extrapolate elements of reflection, learning, and criticism. The key importance of the discussions had and the problematization that emerged at that stage confirmed the need of integrating gaming with other methodology, particularly in learning (Larsen McClarty et al. 2012). Indeed, this phase allowed facilitators and participants to link the experience within the game with the external reality and share the skills learned, at least in part. Sessions with a debriefing reduced for logistical reasons seemed to be partially less effective and memorable.

Conclusion

The activities that Empaville for School carried out contributes to the reflection and analysis on *gamification* for democracy, especially in the context of education. Nevertheless, many questions remain open, and only to some of them are currently possible to answer considering *gamification* as an ongoing and evolving process that must be further analysed, researched, and critically implemented.

According to Deterding et al. (2011), it is possible to affirm in general terms that *gamification* principles are not inherently positive or negative, but rather that the evaluation depends on the use and consequences. Even a well-done and ethical *gamification* is not a proper tool for all contents and situations and in any case it needs to be integrated, especially in education (Larsen McClarty et al. 2012).

Focusing specifically on Empaville for School, a good evaluation of activities does not conceal the great margins for improvement and growth, both in qualitative and quantitative terms, nor some of the important criticalities emerged. First of all, the focus on the group dynamics considered best suited for younger age-groups ended up partially diminishing the individuality in action and choice, therefore a future version will have to take this into account. Secondly, technological equipment, considering both their attractiveness and the great familiarity showed by students, will need to be expanded in terms of number, quality, and internet connectivity. Thirdly, the number of sessions and their geographical location offers a considerable but partial view, especially in terms of socio-cultural and institutional context. Finally, 90 minutes are not enough to analyse whole processes of *gamification* for democracy in learning context, so some longer paths may eventually be designed and implemented in order to allow the examine of dynamics and effects over time. However, keeping even a short version of the game may allow a wider spread and the ability to play the role of *trailblazer*.

In conclusion, the main challenge for Empaville for School and more generally for the *gamification* for democracy (and not only) at the moment is the shift from the mere evaluation of pre-set goals and processes to the prioritization of the analysis of the results obtained. This element is critical to evaluate the world of *gamification* for democracy and, potentially, to give it the credibility it deserves.

References

Allegretti, G., Antunes, S. (2014). The Lisbon Participatory Budget: results and perspectives on an experience in slow but continuous transformation. Field Actions Science Reports, Special Issue 11, 1-10.

Bogost, I. (2011). *Gamification is bullshit*. Wharton Gamification Symposium. Available on http://www.bogost.com/blog/gamification_is_bullshit.shtml,23.9.2013

Bogost, I. (2014). Why gamification is bullshit. In Walz, S. P., Deterding S. (ed.) (2014). The Gameful World. Cambridge, Massachusetts & London, England: The MIT Press.

Cahill, C. (2007). Doing Research with Young People: Participatory Research and the Rituals of Collective Work. Children's Geographies, 5:3, 297-312. DOI: 10.1080/14733280701445895.

Caillois, R. (2001) Man, Play, and Games. Urbana, Chicago: University of Illinois Press.

Chris, F. (2012). The Errant Signal. [Video series] Available at: YouTube.

Collier, D. (2011). Understanding Process Tracing. PS: Political Science and Politics, 44 (4): 823-30.

Deterding, S., Dixon, D., Khaled, R., Nacke, L. (2011) From game design elements to gamefulness: defining gamification. In Proc. Of the 15th International Academic Mind'Trek Conference: Envisioning Future Media Environments. ACM.

Deterding, S. (2014). *Ambiguity of games: histories and discourses of a gameful world*. In Walz, S. P., Deterding S. (ed.) (2014). *The Gameful World*. Cambridge, Massachusetts & London, England: The MIT Press.

Gee, J. P. (2003). What Video Games Have to Teach Us About Learning and Literacy. New York: Palgrave Macmillan.

Gee, J. P. (2005). Why Video Games Are Good for Your Soul. Melbourne: Common Ground Publishing. Gee, J. P., Shaffer, D. W. (2010). Looking where the light is bad: Video games and the future

of assessment. Epistemic Games Group Working Paper No. 2010–02. Madison: University of Wisconsin-Madison. Available at: http://epistemicgames.org/eg/lookingwhere-the-light-is-bad/

Hassan, L. (2017). Governments Should Play Games: Towards a Framework for the Civic Engagement Platforms. In Simulation&Gaming. SAGE, Vol. 48(2), 249-267.

Khaled, R. (2014). *Gamification and culture*. In Walz, S. P., Deterding S. (ed.) (2014). *The Gameful World*. Cambridge, Massachusetts & London, England: The MIT Press.

Larsen McClarty, K., Orr, A., Frey, P. M., Dolan, R. P., Vassileva, V., McVay, A. (2012). *A Literature Review of Gaming in Education*. Pearson's Research Reports.

Lerner, J. (2014). Making Democracy Fun: How Game Design Can Empower Citizens and Transform Politics. Cambridge, MA: MIT Press.

Linderoth, J. (2012). Why gamers don't learn more: An ecological approach to games as learning environments. Journal of Gaming and Virtual Worlds, Vol. 4, No. 1. DOI 101386/jgvw.4.1.45_1.

Macintosh, A. (2004). Characterizing e-participation in policy making. In HICSS (2004). Proceedings of the Proceedings of the 37th Annual Hawaii International Conference on System Sciences. Washington: IEEE. Vol. 5.

Manhic, N. (2014). Gamification of Politics: Star a New Game. Teorija In Praksa, LET 51, 1.

OECD. (2001). Citizens as Partners: Information, Consultation and public participation in policy-making. OECD Publishing.

Pateman, C. (2012). Participatory Democracy Revisited. APSA Presidential: Vol. 10, No. 1.

Sánchez-Franco, M. J. (2009). Extrinsic Plus Intrinsic Human Factors Influencing the Web Usage. In Zaphiris, P., Ang, C. S. (ed.). Human Computer Interaction: Concepts, Methodologies, Tools, and Applications. New York: Information Science Reference. Available on http://www.igi-global.com/chapter/extrinsic-plus-intrinsic-human-factors/22364

Ramirez, D., Squire, K. (2014). *Gamification and learning*. In Walz, S. P., Deterding S. (ed.) (2014). *The Gameful World*. Cambridge, Massachusetts & London, England: The MIT Press.

Rigby, C. S. (2014). *Gamification and motivation*. In Walz, S. P., Deterding S. (ed.) (2014). *The Gameful World*. Cambridge, Massachusetts & London, England: The MIT Press.

Schumpeter, J. A. (1942). Capitalism, Socialism, and Democracy. New York: Harper.

Sintomer, Y., Herzberg, C., Röcke, A., Allegretti, G. (2012). *Transnational Models of Citizen Participation: The Case of Participatory Budgeting*. Journal of Public Deliberation: Vol. 8: Iss. 2, Article 9. Available at: http://www.publicdeliberation.net/jpd/vol8/iss2/art9

Sintomer, Y., Allegretti, G, Herzberg, C., Röcke, A. (2013). *Participatory Budgeting Worldwide - Updated version*. Engagement Global gGmbH - Service für entwicklung-sinitiativen, Bonn. Smith, G. (2009). *Democratic Innovations - Designing institutions for citizen participation*. Cambridge: Cambridge University Press.

Thiel, S.-K. (2016). *A review of Introducing Game Elements to e-Participation*. Krems, Austria: Conference for E-Democracy and Open Government (CeDEM). IEEE. DOI: 10.1109/CeDEM.2016.14.

Walz, S. P., Deterding S. (ed.) (2014). *The Gameful World*. Cambridge, Massachusetts & London, England: The MIT Press.