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Board games and acquiring knowledge of history: research in university teaching[1]

Aleksandra Ilić Rajković
Faculty of Philosophy, University of Belgrade, Serbia | avilic@f.bg.ac.rs

Mirjana Senić Ružić
Faculty of Philosophy, University of Belgrade, Serbia | mirjana.senic@f.bg.ac.rs

Bojan Ljujić
Faculty of Philosophy, University of Belgrade, Serbia | bojan.ljujic@f.bg.ac.rs

Abstract

The paper presents a qualitative research in the possibility of using board games as educational media in history teaching. The study included 58 pedagogy students divided in two groups (13 game-designers and 45 evaluators) and a subject teacher. The research was conducted during a course of The History of Schooling in Serbia (Belgrade University). Students were engaged in project-based learning, with the assignment to create board games, to play and evaluate them, and to present their views, through focus groups, on the possibilities of board games application in history teaching. Students-designers pointed out that creating a board game was a challenge that required sophisticated intellectual and emotional engagement, and that they had acquired knowledge of history with understanding and through problem-solving. Students-evaluators argued that the games had helped them in acquiring and revising the knowledge from a new and unusual perspective.

Keywords: Board-games; Project-based learning; History knowledge

1 Introduction

Board game surely implies *action* (specific kind of activity), but it also encompasses the experience of *play* – the unique modality of human experience (Botturi & Loh, 2008). It is a carefully constructed system designed to create a gameplay experience (Hunsucker, 2016), and to make certain content, problems or materials more clear, personal and closer to the players – it is a sort of *autotelic experience* in which a person is completely involved engaging his or her full operational capacities (Csikszentmihalyi, 1999).

In this research, our focus was on examining students' perspective on the possibilities of using board games as educational media in history teaching. Games were used in two ways – creating and playing the created board games. Through focus group sessions we aimed to understand these processes, the difficulties and advantages as well as students' reflections on both creating and playing the games.

2 Theoretical framework

There is a variety of researches dealing with the use of board games in teaching, where it is discussed about the advantages of using games in history teaching (Abramson et al. 2009; Gonzalo, 2016), in construction of cultural memory (Begy, 2015), or as a platform for collaborative learning (Hunsucker, 2016). Being unpredictable and multiply determined by group dynamics, the (learning) outcomes of gameplay are important for all participants, not only for particular individuals (Henricks, 2011). By experiencing freedom while playing, participants can develop self-consciousness, awareness of the social environment and other people within it as well as relationships they engage in with others (Božović,

2010). Play does not only result from the cultural and societal events. It also represents the source of cultural and societal values (Kajoa, 1979; Huizinga, 1944). Some authors point out that the use of games in teaching positively affects the motivation, engagement and atmosphere in the classroom (Koehler, et al. 2016). Having all that in mind, it is not surprising that some authors state that games use their potential to actively involve the players in the construction of meaning and in the understanding of historical event (Gonzalo, 2016). Our intention was to comprehend the possibilities of the use of board games in history teaching by taking an "inside" look into that process from two aspects – from the perspective of game-designers and from the perspective of those who play the game as a finished product.

In order to observe both perspectives of the process, it was necessary to engage students in a project-based learning (PBL). Projects are complex tasks based on challenging questions. In PBL students are involved in design, problem-solving, decision making or investigative activities; while given the opportunity to work relatively autonomously over extended periods of time, it usually culminates in realistic products (Thomas, 2000). Some of the defining features of PBL include authentic content, authentic assessment, teacher facilitation (but not direction), explicit educational goals, cooperative learning and reflection. All of these features were implemented in this research, since they imply educational interaction among equal participants in joint learning experience within which play and improvisation came to the fore.

2   Methodology

The aim of this research was to explore the potential and to comprehend how the use of board games affects the processes of teaching, learning and acquiring knowledge of history. It is not easy to link experiential learning with the acquisition of knowledge from the past. How can it be possible to experience events that happened a long time ago? In this research we have attempted to examine the possibilities provided by board games on this subject matter.

In order to get the better understanding of the students' perspective on the use of board games and how they affect the processes of teaching and learning, we decided on the qualitative methodology using focus group method. The research was conducted with third year pedagogy students,

during nine weeks of single semester course on the history of schooling in Serbia, at Belgrade University. A group of 13 students created board games using the themes from the course curriculum. The other 45 students were invited to play the games that their colleagues designed. In the end, through focus group sessions, we examined students' perspectives on the process of learning through creating and playing board games for the purpose of acquiring knowledge of history.

In this paper, we will present one segment of the research with the focus on the activities that took place during the research, through three phases – *preparation*, *realization* and *evaluation*; and the students' reflections on the activities, learning process, acquired knowledge and skills.

3   Results and data discussion

The **preparation phase** started with the teacher presenting the assignment and basic principles of board game design. After that, students brainstormed about board games in educational context, using their previously acquired knowledge of pedagogy and psychology. Students' discussion, instead of giving some answers, opened evenmore dilemmas about the given topic. Several commercial games were discussed and played during two weeks period: *Timeline Challenge* (2015), *The Grizzled* (2015), *Freedom* (2012) and *Agricola* (2007).

Students were given the opportunity to work autonomously with freedom to define educational

goals and objectives of their games, to choose the theme, type and mechanism for the games.
Activities of the **planning and realization** phase can be seen through several steps.

Defining educational goals of the games.

Students decided to work in 3 teams and one student worked individually, to create 4 games with different goals: knowledge revision, development of strategic thinking, historical empathy.

Defining the topics of the games.

At the beginning of the project, students started with making an insight into the provided literature for the course. Now, they intensively studied the topics they would present through the games, by approaching the materials in different ways.

For example, the team who decided to make a strategy game focused on understanding the factors that the school's development depends on. In order to make a strategy game, it was not enough just to identify and recognize those factors in the materials they read, but rather to put them in interrelations. A group opting for a game based on historical empathy had a different approach. In the provided literature they only found the topic and key contextual information and focused their attention on the search for additional resources. Here's how one student sums up the previously said:

> *"… It's a very different approach to the material because none of us have taken all the material to read the data in order to memorize the information, but we were thinking about how to put them in the function of the game, and that learning was flowing spontaneously…"*

Developing mechanisms and creating components for the games.

Students, by thinking about this problem, have come to the realization that the educational potential of their games depends on the quality of the mechanism.

> *"…we tried to find some of the key aspects that led to the development of school, such as legislation, textbooks, teachers, and so on, so we listed all that, and then we looked for those pieces of information about the development for each school…."*
>
> *"…how this game would actually trigger empathy… and we came up with the solution to put players in certain situations, so then it was necessary to decide what these situations would be, what they would do in these situations and in general all this mechanism.."*

Students were faced with the problem of how to construct a mechanism that will simulate real historical situations and events. The term simulation is crucial to understanding those board games that are not using historical content only as a decoration. If a game is an exact reproduction of the system it represents, then it would cease to be a game and become a strict simulation without its ludic dimension. Gonzalo (2016) states that two things become necessary in order to make a ludofictional world. First, it is important to establish certain limits related to the way in which we want to represent the reference world (characters, places and specific characteristics of that world). Second, it is necessary to allow an amount of modification within those limits in order to make the *possible world*, and to allow players to be active in the possible world, to be involved in the game and reproduce significant aspects of the events. This is the way the player becomes a part of that world.

Project results – four different board games.

From Mystery to History is a knowledge revision competitive game in which the players should, based on the given information, determine which school the given information relate to. Players draw cards according to color and enter card data on their paper which enables the overview and the possibility to organize and easily memorize the collected information.

Identity is the game with historical empathy as an objective. The story is about the life of civilians in Serbia during the WWI. The game is cooperative; players are in the role of high school students facing a number of situations in which they have to make decisions that may result in a loss of dignity, jeopardy, growth of dignity or safety.

Danilo's game, is a card game for one player led by a game master. A player is in the role of an ordinary man in Serbia at the end of the 19th century, facing a number of different situations in which he should make decisions that determine his life path.

The game *Nastavlenije*[1], is a strategy game in which the players are in the role of the founders of various types of schools that existed in Serbia in the 19th century. In order for one school to develop, it is necessary to satisfy a number of conditions and strategically manage the available resources. Using this game as an example, we will attempt to present its relation to the goals of the History of Schooling in Serbia course. One of the goals is to understand the conditions in which the school system in Serbia has developed. For example, it is necessary to ensure finances, students, teachers, textbooks etc. This game enables students to experience and explore the complexity of schooling. Such experience is the basis for later discussion and analysis of the facts from the schooling history.

In the third **evaluation phase** two game sessions were organized. The games were played by the 45 students who did not participate in their designing. After that, through focus groups (one with students who played games, and the other with students-designers), students presented their views on the

possibilities of the use of board games in history teaching. Observations of the students are grouped around several themes.

Application in the classroom.

Students pointed out that the games could be used as an introduction to a certain topic, for learning something new, for better understanding (of the context), as a revising tool, for evaluation, and for individualized approach; and that board games should not be used too often.

Social relationships in a group, a positive and supportive atmosphere, regardless of the fact whether the game is competitive or cooperative. Game-designers pointed out that in such an atmosphere it was all right to be even criticized, that they were very open to hearing comments evaluating their work, their products. It seems that a change in the field of relationship with other people happened which Božović (2010) also noticed in his observations of developmental role of games and play in human life.

Game as a basis for discussion which starts spontaneously, through action and during the game. The themes that open up depend on the content of the game. These discussions, and the speech in general while playing the games, are a valuable material for further research. Therefore, once more we come to the conclusion that gameplay is about interactive communication and not so much about transactional communication and that fact should be taken into account when launching efforts towards implementing gameplay into the processes of teaching and learning.

The game, the content and learning: the "lived" (experienced) content is revived content. Students have pointed out that the game should not be burdened with information; it should rather provide an experience. The experience is what changes an attitude towards the content, what facilitates the understanding and knowledge acquisition.

The question of durability of knowledge was also raised – what remains after the game. In a strategy game and a game that pursues empathy, the duration is focused on the experience – in the first case of problem situations (making decisions, overcoming and observing causal relationships, etc.); and in the second case an emotional trace (*"Being part of a story"*, *"Being dragged into the context"*).

Game-designers' impressions about the project.

Students pointed out the following as their first impression about the assignment: they were afraid that the task was complicated but challenging; and enthusiastic for being given the opportunity to do something different, interesting and exciting. Although some of them were thinking of giving up, no one did, and most of them were ready for a challenge. They also stated that they have developed three types of skills during this process – social, organizational and skills and abilities to present the knowledge, information or given content through a board game which is a completely new educational medium for them. They pointed out the freedom to be creative, choose the content and plan and organize themselves as they like. We observe this as the confirmation of a statement according to which play supports creativity and productivity during entire lifespan (Lobman & O'Neil, 2011). Students' impressions about game session were mostly positive. They played and enjoyed it. It seems that they experienced the final joy after engaging in unpredictable and pleasantly tense activity, as Huizinga (1944) describes a gameplay. They were very proud of the games they had made and the feedback from the players, and they characterized this activity as a real exchange with their colleagues.

4   Conclusion

Based on the research results and students' reflections, it can be concluded that creating and playing board games have great potentials and should be represented more in history teaching. This conclusion is delivered mostly on the basis of students' perceptions mentioned above.

We recognize the similarity between our findings and the results of some previous researches indicating that playing games leads to creation of something new, intangible, but certainly noticeable. At this moment we want to stress out the development of self-awareness, familiarity with the social environment, relationships with other people, acquisition of social values and roles, creation of cultural and personal identity (Nikolić, Maksić & Ljujić, 2012). Also, if we compare the formal education and learning with board games and improvisation, where all the participants are "performers" who

develop, teach and learn as a community, students in correspondence with teachers actively participate in the processes of teaching and learning, contributing to the growth and the development of the group in which all of them are learners.

Such playful approach to education gives freedom to all actors in the processes of teaching and learning. Freedom is particularly noticeable in the context of understanding, encouraging and creating new learning and teaching potentials through a collective, collaborative and creative work based on the application of board games. If this freedom is to be productive in terms of development, both students and teachers need to learn about games and play, so these could be appropriately used for learning purposes. Thus, learning *about* games and play is a precondition of learning *through* games and play, which also comes out as an implication of our research.

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