

Mock Trial in Distance Education: Application of Gamification in the Teaching of Ethics and Law

Júri Simulado na Educação a Distância: Aplicação da Gamificação no Ensino da Ética e do Direito Jurado Simulado en Educación a Distancia: Aplicación de la Gamificación en la Enseñanza de Ética y Derecho

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ABSTRACT: The interaction between educator and student is increasingly moving away from conservative teaching practices. Active methodologies enable student involvement and interest, as well as promote an active attitude in learning, which is even more desirable in Distance Education. Gamification is one of the possible didactic resources in the virtual learning environment. In the present study, an applied research with a quali-quantitative approach was adopted, with participant observation, in the application of a Mock Trial with students of the Technical course in Multimedia Didactics, in a public educational institution. The practice sought to evaluate the use of gamification to bring students closer to the content, develop the argument, motivate and make the virtual classroom more conducive to interaction. The majority of students (87%) said they were motivated to develop the activity. The results show that the methodology used favoured student engagement, interaction and learning.

ACTIVE LEARNING METHODOLOGY. GAMIFICATION. MOCK TRIAL. DISTANCE EDUCATION.

RESUMO: A interação entre educador e educando afasta-se, cada vez mais, das práticas conservadoras de ensino. As metodologias ativas possibilitam o envolvimento e o interesse do aluno, bem como promovem a atitude ativa na aprendizagem, o que é ainda mais desejável na Educação a Distância. A gamificação é um dos recursos didáticos possíveis no ambiente virtual de aprendizagem. No presente estudo, adotou-se uma pesquisa aplicada com abordagem quali-quantitativa, com observação participante, na aplicação de Júri Simulado com alunos do curso Técnico em Multimeios Didáticos, em uma instituição pública de ensino. A prática buscou avaliar o uso da gamificação para aproximar os alunos do conteúdo, desenvolver a argumentação, motivar e tornar a aula virtual mais propícia à interação. A maioria dos alunos (87%) afirmou motivação no desenvolvimento da atividade. Os resultados apontam que a metodologia utilizada favoreceu o engajamento, a interação e a aprendizagem dos alunos.

METODOLOGIA ATIVA DE APRENDIZAGEM. GAMIFICAÇÃO. JÚRI SIMULADO. EDUCAÇÃO A DISTÂNCIA.

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RESUMO: La interacción entre educador y alumno se aleja cada vez más de las prácticas de enseñanza conservadoras. Metodologías activas permiten la participación e interés de los estudiantes, así como también promueven una actitud activa en el aprendizaje, que es aún más deseable en la educación a distancia. Gamificación es uno de los posibles recursos didácticos en el entorno virtual de aprendizaje. Es una investigación aplicada con un enfoque cualitativo-cuantitativo, con observación participante, en la aplicación del Jurado Simulado con estudiantes del Técnico en Didáctica Multimedia, en una escuela pública. La práctica buscó evaluar el uso de la gamificación para acercar a los estudiantes al contenido, desarrollar el argumento, motivar y hacer que el aula virtual sea más propicio para la interacción. La mayoría de los estudiantes (87%) dijeron que estaban motivados en la actividad. Los resultados muestran que la metodología utilizada favoreció la participación, interacción y aprendizaje de los estudiantes.

METODOLOGÍA DE APRENDIZAGEM ACTIVO. GAMIFICACIÓN. JURADO SIMULADO. EDUCACIÓN A DISTANCIA.

Introduction

Active learning methods favors the processes of interaction between educator, student and their peers, and have shown positive results in the teaching-learning processes. For Fonseca (2014, p. 160), learning, from the point of view of student-teacher interaction for the production of knowledge, is an activity that produces "modifiability, a process of change caused by the mediatisation of the teacher and the intentional and motivational practice of the student".

The use of active methodologies presupposes an active role on the part of the students. It is a pedagogical action that encourages involvement in solving problems consistent with their area of study, offering the opportunity to exercise analysis, investigation and reflection skills (Mitre et al., 2008).

The teacher's position changes to that of a learning mediator. His or her role is to develop situations that allow the construction of knowledge by the students. It is also their role to constantly monitor and advise the students, proposing challenges and helping them assign meaning to this construction. In this sense, gamification is justified as a strategy for the student involvement with learning and interaction with peers. It creates an environment that facilitates learning (Fardo, 2013). It allows students to learn how to apply theories and concepts and to seek solutions to different problems. It minimizes the importance of memorization and turns students into protagonists of their own teaching-learning process (Souza & Casa Nova, 2017).

In Role-Play Game (RPG), students put themselves in the place of certain characters and develop activities from the perspective of this roles or functions. The Mock Trial has these characteristics, since the group members are separated according to functions or roles to act in the defense, prosecution or judgment of specific cases. There is a clear separation of the groups' actions and the teacher's role as a mediator, who organizes and structures the contributions of the groups. Still, the activity takes place in a fictional environment, which is the trial.

The Mock Trial activity has the potential to provide students with the experience of scientific practice, in the sense of being stimulated to debate, position and defend ideas. Moreover, it favors the deepening of content knowledge, the development of argumentative skills and discussion (Vieira, Melo & Bernardo, 2014).

The pedagogical practice of the Mock Trial requires the student to assume a certain role and face factual problems and situations. Such an approach makes it easier for the teacher to approach issues that go beyond the theoretical content, such as strategy and negotiation, apart from the relationship with team mates, with opponents, and with public authorities, among others (Ghirardi, 2012). Participatory legal education is a teaching paradigm that contrasts with traditional teaching by placing the student at the focus of the learning process (Feberbaum & Klafke, 2020).

A field study was carried out with participant observation, based on a quali-quantitative method, for the purpose of analyzing the impacts of the Mock Trial. The emphasis was on aspects such as interaction, motivation, fluency, argumentation and cooperation among students and between the students and the teacher, reorienting the teaching-learning process of ethics and law. The students participating in the research were from the 2nd and 3rd periods of a technical course in a public educational institution. The study took place during the first academic semester of 2020.

The implementation of this methodological approach in a distance learning course, immersed in the potential of digital information and communication technologies (DICT), represents a challenge due to the scares availability of guiding studies.

1 Gamification as an Active Learning Methodology in Distance Education

The adoption of active methodologies has been driven, in recent decades, by the opposition to traditional teaching methodologies. In active methodologies, students go beyond a passive performance as receivers in the teaching-learning process. They adopt an interactive posture, taking active charge of learning and performing, under the mediation of the teacher. The "teacher/student or teaching/learning relationship is pedagogically mediated, oriented by various instructional materials and tutorial guidance" (Riano, 1997, p. 20).

The teacher as a mediator, facilitator and activator of the teaching and learning process has the role of "provoking, challenging, or promoting the conditions to build, reflect, understand, and transform, without losing sight of the respect for the autonomy and dignity" of the students (Diesel; Baldez; Martins, 2017, p. 278).

Debald and Golfeto (2016, p. 6) suggest that the teacher should:

[...] be flexible and adaptable in different contexts of the teaching practice; use creativity in the development of teaching activities; be willing to relearn the teaching role; be patient and empathic with students and colleagues; act interdependently; improve the production of knowledge to solve contemporary problems; to base the learning process on challenges and problems of the current reality; take ownership and be able to develop technology resources for teaching and learning activities; develop mentoring skills; and adopt attitudes of openness to change.

According to Oliveira (2020), changes are expected in the ways of being, acting and relating in the teaching and learning process, in which the teacher's posture is no longer that of the holder of all knowledge, but rather of an experienced researcher who guides students in their discoveries. The focus of this process is the student, who develops a protagonist posture in his learning process.

For Moran, Masetto and Behrens (2013, p. 18), "[...] active methodologies are starting points to advance on processes of reflection, cognitive integration, generalization, and redevelopment of new practices."

Learning is more significant when students are intimately motivated, when they find meaning in the proposed activities, when they are consulted in their deep motivations, when they engage in projects in which they bring contributions, when there is dialogue about the activities and how to perform them (Moran, 2013).

From the perspective of the construction of knowledge, Maturana and Varela (1995, p. 12) understand that, "if life is a process of knowledge, living beings construct this knowledge not from a passive attitude but from interaction".

According to Damiani (2008, p. 223), collaborative activities can create an environment rich in academic and social learning for both students and teachers, as well as provide them with a greater degree of satisfaction. Collaborative work also enables to rescue values such as sharing and solidarity, which have been lost along the path trodden by our extremely competitive and individualistic society. The interaction and collaboration between individuals result in the production, transformation and change of these individuals' identities, both in terms of their knowledge and practical abilities.

Bergmann and Sams (2016) suggest that the physical or virtual learning environment stands out with the selection of a good methodological strategy, with the teacher performing as a facilitator of social interaction. Such a methodology must allow students to learn from experience, collaboration or even through instruments that mediate the interface between the subject and knowledge. Collaborative activities also promote the development of responsibility with regard to the authorship of the final product, drawing from the exchange of experiences and knowledge between subjects (Damiani, 2008).

There are different possible practices for active methodologies, one of which is Gamification. Gamification is the targeted use of elements for educational purposes, such as structured objectives, feedbacks, challenges, the student involvement as players, competition and cooperation.

According to Moran (2018, p. 20) gamification presents "important strategies of enchantment and motivation for a faster and close-to-real-life learning process", helping students to face challenges, phases, difficulties, to deal with failures and to take risks safely.

This motivational power may be due to the mechanisms of encouragement and engagement intrinsic to games, such as rewards, the joy of playing and/or the possibility of winning (Seixas, Gomes, Filho & Rodrigues, 2014).

Gamification is considered as an active methodology of learning because it corroborates to the understanding of Moran (2013). For the author, the active methodologies stir up curiosity, propose challenges, engage the pupil in experiences, enable collaborative work, develop the autonomy for taking decisions, give emphasis to the protagonist role of the student, value engagement and effective participation in the construction of the learning process. Gamification, as an active methodology used to build a strategy for planning the teach-learning process, is enhanced by the updated pedagogical practices employing DICT.

Distance Education as an educational modality faces challenges that go beyond the integration of technologies to educational processes. These challenges include the adoption of active learning methodologies by teachers, especially those enhanced by the use of DICT. Thus, to understand Distance Education is to understand the integration of DICT in the educational processes and to reflect on its use in educational practice. More than that, it is to promote differentiated educational actions with the use of technologies. It is not just about what Belloni and Bérvot (2009) identify as technical mediatisation, that is, the design, manufacture and pedagogical use of multimedia materials. Bacich (2014) highlights that the teacher must learn from the use of digital technologies and not about their use.

1.1 Mock Trial and the Development of Argumentation and of Interaction between Students

In the Mock Trial, students are placed in certain roles/functions and must develop the activities from these roles/functions perspective, as competitors, debating arguments and ideas. They position themselves as defenders, accusers and judges, acting in real cases during a trial. The debaters compete for the best arguments in order to convince the judge. For Souza and Casa Nova (2017), this teaching strategy increases the interest, understanding and integration of the student with the content, as well as their active participation in the construction of knowledge.

The Mock Trial works as a didactic resource that promotes the development of arguments by the students. This happens as they get deeper into the content in a voluntary, cooperative and motivated way, in search for better argumentation ideas. Fragelli (2014, p. 231) identified that gamification resulted in greater student participation, interest, and joy and that, cognitively, there was an interest in achieving greater knowledge. What is important is that students have an active role in the production of knowledge, with a positive impact on their learning.

Kolstoe (2000) states that the practice increases the student's ability to understand the point of view of others, thus stepping in other people's shoes in certain situations. This creates difficulties that must be overcome, as having to act from the perspective of a character they do not necessarily agree with.

In this sense, the Mock Trial is a strategy for teaching and developing the arguments of the students, who will need to position themselves in relation to the topic under debate, through allegations and counter arguments.

As for the dimensions of the Mock Trial, it is relevant to present some opportunities, such as: (a) convincing the judge, through the development of the ethical and normative argument; dispute between opposing positions, of the defense and the prosecution, and the exchange of argumentative resources, in the moments of reply and rejoinder; (b) the evaluation of the components' performance, either individually or collectively, what is not necessarily dependent on the result obtained in the trial, but only through the course of the defense / accusation / judgment allegations regarding the content of ethics and law; (c) competition, with a specific time frame for each component of the groups to perform; surprise elements, with information and evidence presented throughout the trial (this requires in-depth knowledge of the content, to refute or claim any information); reward, in the form of a favorable decision of the judge, as well as of the verification of the correct answers given to the case; (d) the introduction of motivating emotions regarding the development of the chain of arguments for the purpose of convincing the judge; feeling of progression; strengthening of relationships between the components of the groups, which interact and support each other's arguments to make them stronger and more coherent.

The Mock Trial starts with specific cases or themes, which are explored by students through defense and accusation arguments, analysis and objective assessment of facts in correlation with the content. The use of gamification can favor the learning of more complex contents, which usually arouses little interest, engagement and motivation among students (Fragelli, 2014).

Students need to develop skills in argumentation, critical thinking, hypothesis formulation and decision making, improvisation, interaction and cooperation. Aspects such as motivation, interaction, cooperation and argumentative capacity are developed from the application of the Mock Trial.

Plantin (2005 apud Stumpf, 2016) emphasizes that the students' argumentative interventions in the debates lead to an active teaching-learning process, enable the identification of dubious and contradictory statements, and deepens the content and the theory. In addition, the debate allows the student to develop reasoned argumentation, counter-argumentation, mental agility, intellectual confrontation and self-confidence (Moura, Pereira and Souza 2017).

The argumentation is understood, in the words of Cuenca (1995), as a communicative means of interpersonal relationship that confronts knowledge and opinions with the objective of convincing someone of a certain point of view. Still, Sanmartí (2003 apud Vieira, Melo and Bernardo, 2014), states that the argumentation presupposes the choice between alternative options or explanations and the rational analysis that allows the most appropriate judgment. It should be noted that the improvement of the student's argumentative capacity in the Mock Trial was mentioned by Brito and Sá (2010), since it denotes the need to justify or refute a position, a thesis, an idea.

2. Methodological Pathways

This research presents the use of gamification, specifically, the didactic resource of the Mock Trial, with students of the 2nd and 3rd years of a distance technical course, during the first academic semester of 2020. The didactic materials of the Mock Trial were made available in the classroom of the Legislation and Ethics discipline, in the virtual learning environment called *Moodle* 3.1, and the simulation of the trial took place through web conferencing. The main objectives of the Mock Trial was student-centered learning, with an emphasis on aspects such as interaction, motivation, fluency, argumentation and cooperation between students and between students and the teacher, reorienting the teaching-learning process in the study of ethics and law.

In this scenario, the present study has an applied and exploratory nature, with a quali-quantitative approach and a participant observation research method, since it implies the involvement and identification of the researcher with the students (Silveira & Córdova, 2009).

For the sample, 46 students were invited, of which 32 decided to participate. Among them, 65.6% were female and 34.4% were male. The prevailing age groups were 25 to 30 years old, with 28.1%, and 41 to 50 years old, with 28.3%. Regarding educational level, 37.5% of students had completed high school, 34.4% were undergraduate, 25% were post-graduate *lato sensu* and were 6.3% masters or doctors.

The study included planning, the application of pedagogical practice, data collection and data analysis.

The planning of the juries' activities involved the indication of references and supporting materials on the content of ethics, law and education, so that students could select and carry out individual research as to the general content necessary to support decisions and arguments. The students prepared themselves individually and proactively, mediated by the teacher and the first researcher of the study. There were also meeting opportunities for the whole group to clarify doubts about the contents. In total, 15 class hours were made available for the didactic procedures which culminated in the debate of the Mock Trial.

The application of the Mock Trial took place in the discipline of Legislation and Ethics of a technical course and had the participation of 32 students. Two rounds of the Mock Trial were developed in synchronous classes conducted by web conferences.

For data collection, in addition to participant observation and notes made by students during the juries, a semi-structured questionnaire was applied. It was divided into: ten closed questions regarding the Usability Requirements; six closed questions regarding Pedagogical Requirements and three open questions. In the open questions, students were encouraged to present their opinions on problems, difficulties, potentials and suggestions for improving the application of the Mock Trial.

The analysis was based on the transcribed data, as well as on the graphics generated from the questions presented to the student. The material and definition of the themes was explored, relating them with the purpose of study and the articulation of the data from the theoretical framework.

2.1 The Mock Trial: Experience Description

The theme of the Mock Trial was ethics and law in the school environment. The concrete cases involved ethical and normative facts and behaviors in the school environment, school legislation, the education of minors, the responsibility of the family in relation to minors, minors in conflict with the law and education and the Code of Ethics for Education Professionals.

The material used by the students was the same preparatory material made available in advance by the mediating teachers in the virtual classroom, which offered subsidies for students to formulate their arguments. The material was composed by video classes, e-books, and slides with the presentation of concrete cases of social conduct and conduct in the school environment. These should be appreciated in advance by students and resolved, according to ethical and normative rules, during the realization of the Mock Trial. As for the dynamics, the room was divided into groups of five or six students. The groups were then drawn in: "defense group", "prosecution group" and "decision group". The students worked on the defense, accusation or decision arguments regardless of their personal position in relation to the specific case presented.

Then, the groups started to act on the concrete cases, within the theme "guiding ethics in the educational environment", presenting moral, ethical and normative arguments, interacting with peers and counterpointing the arguments of the opposite group. The students should present enough arguments to justify their group activities, regardless of their personal position in relation to that specific case. All members of the group were encouraged to speak, either by audio / video or by using chat, in writing.

The time and order in which the arguments were presented was divided into: ten minutes for the prosecution group, ten minutes for the defense group, followed by a five-minute reply of the prosecution and final five minutes for the defense's rejoinder. After the time for argumentations was exhausted, the decision-making group presented the arguments of the groups that most motivated them towards their decision, as well as the solution of the ethical / normative conflict under discussion.

In the end, a summary of the arguments presented by the groups was prepared. It was correlated to the contents of the discipline, exploring the assertiveness of the decision taken by the decision-making group in view of the material made available in the discipline. Each student could then check the relationship between the content and that specific case. The Mock Trial ended when all the concrete cases, a total number of three, were decided and discussed in view of the discipline contents.

After the performance, the participating students were invited to answer, without identification, a specific questionnaire. They evaluated the experience and the pedagogical and usability requirements. They were also asked to give their opinion on the acceptability of the Mock Trial as a didactic resource regarding the contents of ethics and law.

The evaluation of the students was based on the individual performance demonstrated in argumentation and counter-argumentation, whether oral or written. The following aspects were also considered: coherence in relation to the position of the group, understanding and adequacy to the theme and the available material, and the individual posture during the interaction with other colleagues, in a collective evaluation.

3 Results and Discussion

The analysis of the results allowed the researchers to reflect and perceive the contribution of the simulated cases proposed to the students for debate. It instigated the deepening of the content, the critical and argumentative thinking, the research and the theoretical basis of the arguments.

The students were very receptive to participation in the Mock Trial. It was verified by the teachers' reports that students were motivated to expand their knowledge in search of possible arguments to be used during the activity. All students were involved in the dynamics, whether by video, audio, or by chat, in writing. The result corroborates Moran's (2018) understanding of the attractiveness of this activity to students in terms of perception, language, challenges, cooperation and rewards.

As for the methodology adopted, the majority of respondents, 83.3%, indicated that having access to the content beforehand facilitated learning. Other 87% of the students stated having felt motivated during the practice of the Mock Trial and 82.4% indicated that it also led to greater motivation for deepening their knowledge on the content. About 89% stated that the Mock Trial allowed and encouraged the growing autonomy and involvement of students. As for the increase in class participation, 36% stated that the Mock Trial expanded participation in the class. Around 95% stated that the topics and cases addressed made reference to their everyday context, in a perspective of citizenship formation. Approximately 86% indicated the Mock Trial as a relevant method to increase interaction and cooperation between students. These results corroborate with the principles of active methodologies

presented by Diesel, Baldez and Martins (2017) which are: the teacher as a mediator and activator of the teaching and learning process, the student as the center of the teaching and learning process, the autonomy of the student, reflection, problematization of reality, teamwork, and innovation.

Other results increase the researchers' positive perception of the study, since the Mock Trial proved to be attractive and engaging for more than 86% of students. Most students, 94.4%, considered that the Mock Trial promoted creativity, with the possibility of several pathways, answers, and solutions. As for the resistance to the method, 17% indicated the need for more time to prepare their arguments and presentation for the trial. Hamari, Koivisto and Sarsa (2014) also identified positive results in the use of gamification for educational purposes, with increased motivation, engagement and student satisfaction, as well as better learning outcomes.

The evaluation presented by the students reported greater motivation and interaction and the interest in deepening their knowledge of the content, as can be seen from the following quotations:

Quote 1 - Interesting class that makes us learn in a more fun way.

Quote 2 - Although it was interesting, it would need more time for articulations between the group members.

Quote 3 - Through critical capacity, the activity proposed the development of arguments and analysis of its moral and ethical values.

Quote 4 - The opportunity to think about the "two sides of the coin", to think critically, to respect the position of the other, among other things.

Quote 5 - It was very interesting because it allowed us to learn effectively through a game.

Quote 6 - It provided interaction with the other participants.

Quote 7 - Very good, it was possible to understand in a more playful way the concepts of Ethics and Law that are a little complicated to understand.

Quote 8 - Situations that happen in real life being used to better assimilate the theme with greater student participation.

Quote 9 - Good for developing arguments within the context in which one is immersed and has to act even if imposed at times. It also allows you to find solutions.

Quote 10 - Exercise of argumentation, interaction between colleagues, development of a global view of situations.

Quote 11 - We discussed complex issues based on the proposed cases and this allows for more in-depth reflections and arguments.

The researchers' observations, as well as the results of the students' responses, corroborate the reiterated understandings of the literature, already presented in Souza and Casa Nova (2017); Hamari et al. (2014); Ghirardi (2012); Damiani (2008); Seixas et al. (2014).

It is relevant to point out that during the Mock Trial, students were quite engaged in the process, which was shown by their use of the formal language of the courts in the role of lawyers and judges. The students were very engaged in argumentation, applicable rules, tests and points that disadvantaged the opposite group. The analyses showed that the Mock Trial enabled the production of various arguments and counter-arguments.

The arguments of the defense, of the prosecution and those presented by the judges, as the basis for the decisions, became more and more complex as the gamefied activity developed. This was caused by the opposition of ideas and arguments of the groups. In addition, evidence presented and facts identified during the trial required students to be critical and to undergo logical and quick thinking. This happened in synchrony with an expanding sense of cooperation between the components of the groups.

The alternation of roles during the trial resulted in the development of a set of complex arguments (Platin, 2005 apud Stumpf, 2016), with clear quality of the supporting literature. Other abilities stimulated were: Argumentation capacity; mental agility (Moura et al., 2017); convincing others of one's point of view (Cuenca, 1995); seeing from the perspective of the other (Kolstoe, 2000); choosing between

alternative options or explanations and the rational analysis that allows the most appropriate judgment (Sanmartí, 2003 apud Vieira, Melo & Bernardo, 2014). All these results find support in the theoretical framework.

These perceptions are also supported by Kolstoe (2000) who states that among the characteristics of this teaching model are the evaluation and criticism of knowledge and opinions and the establishment of a consensus conclusion.

The Mock Trial proved to be a didactic resource conducive to the development of arguments and the promotion of student learning, through motivation and interaction, which reinforces the result achieved by Fragelli (2014).

Conclusions

The present research sought to investigate the potentialities and peculiarities of the pedagogical resource of gamification, using, for that, the Mock Trial. This didactic resource was applied in two classes of the 2nd and 3rd periods of a technical course from a public educational institution, in the first academic semester of 2020.

It is noteworthy that the active learning methodology expands the students' engagement and motivation. The use of gamefied activities is an interesting strategy for the teaching-learning process, since it favors the learning of more complex content or of a subject of little interest for students. For Moran (2015) and Damiani (2008), group and individual practices involving competition, collaboration, and strategy, with well-defined stages and skills, are increasingly present in the various areas of knowledge and levels of education.

In view of the objective of training active and creative students, the traditional presentation of content should no longer be the center of activities in the classroom, giving place to participatory teaching methods. Participatory teaching is a skillful method for success in the teaching process because it demands the students to develop themselves in several aspects, instead of being a mere receptor of contents for memorization. The pedagogical practice of the Mock Trial tends to be effective in teaching legal subjects (Ghirardi, 2012).

The Mock Trial was employed as a didactic resource, observing the clear separation of the activities of the groups and the teacher as a mediator. Like this, we sought to highlight the potential and challenges for the effective learning practice through an active methodology involving gamification with the aid of DICT. Based on the effective mediation of teachers, it generated reflections on concrete cases and a direct relationships between theory and reality, enabling effective learning.

This pedagogical resource, based on gamification and DICT, when applied in the context of distance education, demonstrated that it is possible to adapt the didactic arrangements in order to optimize the physical distance. For Moran (2012) distance education can be done at the same levels as regular education.

We consider that the proposed objective was reached because the following potentialities were identified from the pedagogical practice: development of fluency; the ability to expose arguments; the construction of collective critical knowledge; interaction between peers; encouragement of cooperation; student motivation; and student protagonism. Thus, we agree with Moran (2007) in that one of the greatest challenges for the educator is to help make information meaningful, that is, to choose important information among many possibilities.

Thus, we conclude that the educational objectives of the Mock Trial were achieved, based on the analysis of the questionnaire results, the students 'reports, and the students' performance during the trial. The same conclusion is reached from the standpoint of monitoring the development of all stages of the application of this methodological resource by the teachers.

From the analysis, it was possible to observe a positive correlation between the application of gamification as a strategy of active learning and the results of greater interaction, motivation, fluency and cooperation among students. With great prominence, also, it is possible to observe the development of students' argumentation skills and the construction of collective critical knowledge. Legal education must have the student as the protagonist and active participant in the teaching and learning process (Guirardi & Oliveira, 2016).

Regarding the challenges of applying the Mock Trial, 17% of the students demonstrated resistance to the method. The main reason indicated was the need for more time to prepare the arguments and to expose them during the trial. Other students considered that they would need more time for the articulations within the group.

From the perspective of future applications of gamification, the trial simulation rounds can also be carried out in person. Despite the fact that there was no loss in conducting it through web conferencing, it is also possible to use it when a distance course is mixed with face-to-face meetings.

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References

Bacich, L. (2018). Formação continuada de professores para o uso de Metodologias Ativas. In: Bacich, L. e Moran, J. Metodologias ativas para uma educação inovadora: uma abordagem teórico-prática. [Minha Biblioteca]. Retirado de https://integrada.minhabiblioteca.com.br/#/books/9788584291168/. Acesso em: 24 jul. 2020.

Belloni, M. L.; Bévort, E. (2009). Mídia-educação: conceitos, história e perspectivas. Revista Educação e Sociedade, Campinas, v. 30, n. 109, p. 1081-1102, set./dez. Disponível em: http://www.scielo.br/pdf/es/v30n109/ v30n109a08.pdf. Acesso em 18 jun 2020.

Bergmann, J.; Sams, A. (2016). Sala de aula invertida: uma metodologia ativa de aprendizagem. (Tradução Afonso Celso da Cunha Serra). 1ª ed. Rio de Janeiro: LTC, 104 p.

Brito, J.Q. e Sá, L.P. (2010). Estratégias promotoras da argumentação sobre questões sócio-científicas com alunos do Ensino Médio. Revista Electrónica de Enseñanza de las Ciencias, v. 9, n. 3, p. 505-529.

Cuenca, M. J. (1995). Mecanismos lingüísticos y discursivos de la argumentación. Comunicación, lenguaje y educación, v. 7, n. 2, p. 23-40.

Damiani, M. F. (2008) Entendendo o trabalho colaborativo em educação e revelando seus benefícios. Disponível em www.scielo.br/pdf/er/n31/n31a13.pdf . 2008. Acesso em: 25 jul. 2020.

Debald, B.S.; Golfeto, N. V. (2016). Protagonismo Estudantil e Metodologias Ativas de Aprendizagem em Tempos de Transformação na Educação Superior. Pleiade, 10(20): 05-11, Jul./Dez.. Disponível em: https://pleiade.uniamerica.br/index.php/pleiade/issue/view/46. Acesso em 26 mar. 2020.

Diesel, A.; Baldez, A. L. S.; Martins, S. N. (2017). Os princípios das metodologias ativas de ensino: uma abordagem teórica. Revista Thema. v. 14, n. 1, p. 268-288. Disponível em:<htp://revistathema.ifsul.edu.br/index.php/thema/article/view/404>. Acesso em: 29 jul. 2020.

Fardo, L. M. (2013). A gamificação aplicada em ambientes de aprendizagem. Revista Novas Tecnologias em Educação, Porto Alegre, v. 11, n. 1, p.1-9. Disponível em: < http://www.seer.ufrgs.br/renote/article/view/41629>. Acesso em: 25 jun 2020.

Fonseca, V. (2014). Cognição, Neuropsicologia e Aprendizagem. 6^a ed. Editora Vozes, Petrópolis, Rio de Janeiro, 183 p.

Feferbaum, M; Klafke, G. F (2020). Metodologias ativas em direito: guia prático para o ensino jurídico participativo e inovador. São Paulo: Atlas.

Fragelli, T. B O. (2017). Gamificação como um processo de mudança no estilo de ensino aprendizagem no ensino superior: um relato de experiência. Rev. Inter. Educ. Sup.Campinas, SP. v.4, n.1, p.221-233. jan./abr.

Ghirardi, J.G. (2012) O instante do encontro: questões fundamentais para o ensino jurídico. São Paulo: Fundação Getulio Vargas.

Ghirardi, J.G; Oliveira, J.F. (2016). Caminhos da superação da aula jurídica tradicional. Revista Brasileira de Estudos Políticos | Belo Horizonte | n. 113 | pp. 379-404 | jul./dez. Disponível em :<http://bibliotecadigital.fgv.br/dspace/bitstream/handle/10438/10303/O%20instante%20do%20en contro.pdf?sequence=1>. Acesso em 03 de ago de 2020.

Hamari, J., KoivistoJ., & Sarsa, H. (2014) "Does gamification work? A Literature Review of Empirical Studies on Gamification," 47th Hawaii International Conference on System Sciences, Waikoloa, HI, 2014, pp. 3025-3034, doi: 10.1109/HICSS.2014.377.

Kolstoe, S. D. (2000). Consensus projects: teaching science for citizenship. International Journal of Science Education. Disponível em https://www.tandfonline.com/doi/pdf/10.1080/095006900289714?needAccess=true>. Acesso em 02 de ago de 2020.

Maturana, H., & Varela, F. (1995). A árvore do conhecimento: as bases biológicas do entendimento humano. São Paulo: Editorial Psy II.

Mitre, S. M., Batista, R. S., Mendonça, J. M.G, Pinto, N. M. M., Meirelles, C. A. B, Porto, C. P, Moreira, T., & Hoffmann, L. M. A. (2008). Metodologias ativas de ensino-aprendizagem na formação profissional em saúde: debates atuais. Ciência & Saúde Coletiva, Rio de Janeiro, v. 13, n. 2, dez. Disponível em: <http://www.scielosp.org/scielo.php?pid=S141381232008000900018 &script=sci_abstract&tlng=es>. Acesso em 20 jul 2020.

Moran, J. M., Masetto, M, & Behrens, M. (2013). Novas tecnologias e mediação pedagógica. 21ª ed. Campinas: Papirus.

Moran, J. M. (2007). A Educação que desejamos: Novos desafios e como chegar lá. Campinas, SP: Papirus.

Moran, J. M. (2012). O que é educação a distância. Disponível em: http://www2.eca.usp.br/moran/wp-content/uploads/2013/12/dist.pdf. Acesso em 06 ago 2020.

Moran, J. M. (2015). Mudando a educação com metodologias ativas. In Convergências Midiáticas, Educação e Cidadania: aproximações jovens. Coleção Mídias Contemporâneas. Disponível em http://www2.eca.usp.br/moran/wpcontent/uploads/2013/12/mudando_moran.pdf. Acesso em: 2 ago. 2020.

Moran, J. M (2018). Metodologias para uma aprendizagem mais profunda. In: Bacich, L. e Moran, J. Metodologias ativas para uma educação inovadora: uma abordagem teórico-prática. [Minha Biblioteca]. Retirado de https://integrada.minhabiblioteca.com.br/#/books/9788584291168/. Acesso em: 29 jul. 2020.

Moran, J. M (2015). Coleção Mídias Contemporâneas. Convergências midiáticas, educação e cidadania: aproximações jovens. Vol. II] Carlos Alberto de Souza e Ofelia Elisa Torres Morales (orgs.). PG: Foca Foto-PROEX/UEPG, 2015. Acesso em: 29 jul. 2020.

Moura, M. F., Pereira, N. A., & Souza, S. T. (2017). Debate: uma técnica de ensino voltada a pluralidade de pontos de vista. In: Revolucionando a sala de aula: como envolver o estudante aplicando as técnicas de metodologias ativas de aprendizagem. São Paulo: Atlas. cap. 5, p. 51-62.

Oliveira, Z. M. R. (2010). O currículo na educação infantil: o que propõem as novas diretrizes nacionais? Ministério da Educação. Orientações curriculares nacionais para educação infantil. Brasília: MEC/SEF.

Oliveira. S. (2020). Modos de ser estudante as pedagogias ativas: autonomia e aprendizagem na experiência do indivíduo livre. In: Debald, B. Metodologias Ativas no Ensino Superior: O Protagonismo do Aluno - Série Desafios da Educação. Grupo A.

Riano, M. B. R. (1997). La evaluación em educación a distancia. In Revista Brasileira de Educação a Distância. Rio de Janeiro. Instituto de Pesquias Avançadas. Ano IV, N° 20, p 19-35.

Silveira, D. T., & Córdova, F. P. (2009). A pesquisa científica. In: Gerhardt, T. E.; Silveira, D. T. (Org.). Métodos de pesquisa. Disponível em: <http://www.ufrgs.br/cursopgdr/downloadsSerie/derad005.pdf>. Acesso em: 4 mar. 2020.

Seixas, L. D., Gomes, A. S., Filho, I. J., & Rodrigues, R. L. (2014). Gamificação como Estratégia no Engajamento de Estudantes do Ensino Fundamental. Anais do XXV Simpósio Brasileiro de Informática na Educação (SBIE 2014).

Souza, L. N., & Casa Nova, S. P C. (2017). O role-play (jogo de papeis) aplicado no ensino e aprendizagem. In: Leal, E. A., Miranda, G. J., Casa Nova, S. P. D. C. (ORGS.). Revolucionando a sala de aula: como envolver o estudante aplicando técnicas de metodologias ativas de aprendizagem. São Paulo: Atlas.

Stumpf, A. (2016). Júri Simulado: o uso da argumentação na discussão de questões sociocientíficas envolvendo radioatividade. Experiências em Ensino de Ciências V.11, No. 2. Disponível em < https://if.ufmt.br/eenci/artigos/Artigo_ID317/v11_n2_a2016.pdf>. Acesso em 23 de jun. 2020.

Vieira, R. D.; Melo, V. F., & Bernardo, J. R. R. (2014). O júri simulado como recurso didático para promover argumentações na formação de professores de física: o problema do 'gato'. Ensaio: Pesquisa em Educação em Ciências (Online)., v.16, p.203 - 226.

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