Progress. Journal of Young Researchers 14/2024
ISSN 2543-8638 DOI: https://doi.org/10.26881/prog.2024.14.07

Zombies and Aliens: Fantasy and Science-Fiction Simulations in Teaching Political Science, International Relations and Security Studies

Piotr Walewicz | Uniwersytet Kazimierza Wielkiego w Bydgoszczy
ORCID: 0000-0001-6878-4380

Summary

Keywords:
political science education, simulations, role-playing, popular culture, student-centered learning

The article explores the pedagogical potential of integrating fantasy and science fiction simulations into teaching political science, International Relations or security studies at the university level. Recognizing the influence of popular culture on contemporary students, the article advocates for leveraging the immersive experience of simulations based on unusual topics. Drawing inspiration from similar successful didactic endeavors, we introduce an outline for a pedagogical experiment and key takeaways from its preliminary tests on students from various courses. Theoretical and empirical foundations are provided to support the experiment's methodology, emphasizing the use of imaginative scenarios to engage students and provide them with a set of important skills, as well as foster critical thinking and enhance creative problem-solving in an empowering educational experience. The article presents the structure of the experiment, conducted over three years with diverse student groups, yielding promising early results and positive feedback, but also touches on its challenges and limitations. It concludes that team-based role-playing simulations provide an accessible, low-tech yet innovative tool which could make its way into more curriculums.

Zombie i kosmici: symulacje fantasy i science fiction w nauczaniu politologii, stosunków międzynarodowych i studiów nad bezpieczeństwem

Streszczenie

Słowa kluczowe:
edukacja politologiczna, symulacje, odgrywanie ról, kultura popularna, uczenie zorientowane na studenta

Artykuł stanowi analizę pedagogicznego potencjału integracji symulacji fantasy oraz science fiction do nauczania politologii, stosunków międzynarodowych i studiów nad bezpieczeństwem na poziomie uniwersyteckim. Rozpoznając wpływ kultury popularnej na współczesnych studentów, artykuł opowiada się za wykorzystywaniem immersyjnego doświadczenia symulacji opartych na nietypowych tematach. Inspirując się podobnymi i zakończonymi sukcesem

przedsięwzięciami dydaktycznymi, proponuje się zarys eksperymentu pedagogicznego wraz z głównymi wnioskami z jego wstępnych testów na studentach różnych kierunków. Podane są podstawy teoretyczne i empiryczne dla metodologii eksperymentu, podkreślające wykorzystywanie pobudzających wyobraźnię historii w celu zaangażowania studentów i zapewnienia im zestawu ważnych umiejętności, a także krzewienia krytycznego myślenia i wzmacniania kreatywnego rozwiązywania problemów w upodmiotawiającym doświadczeniu edukacyjnym. Artykuł prezentuje strukturę eksperymentu, prowadzonego od trzech lat na zróżnicowanych grupach studentów, przynoszącego obiecujące wstępne rezultaty oraz pozytywne opinie samych studentów, ale także wspomina o jego wyzwaniach i ograniczeniach. Konkluduje, iż zespołowe symulacje z ogrywaniem ról zapewniają łatwo dostępne, niskotechnologiczne, lecz innowacyjne narzędzie, które mogłoby trafiać do większej liczby programów nauczania.

Introduction

Young people in the third decade of the 21st century grow up in multiple worlds at the same time. Apart from the 'real' world they live out sizable parts of their lives embedded in the imagined worlds of movies, TV shows or computer games. Thus, their imaginations often surpass those of their teachers, even if their knowledge about political reality is underwhelming. That they revel in those alternative realities more than in their immediate surroundings has been a challenge for pedagogy for a long time. It should not, however, be seen as a threat to the didactic process but as a chance to update and subsequently improve it. There are no wrong ways to go about it as long as one tries to adequately address the interests and intellectual needs of contemporary students in a manner which still fulfills the basic teaching function of any science in question. Within political science the need for "gateway" courses utilizing any form of active, non-traditional learning has already been noticed (Archer, Miller 2011).

The article strives to provide some theoretical and empirical grounds as well as experiment-based inspiration for university lecturers who want to utilize the learning potential of the modern students' fecund imagination in order to teach complex political and security issues. It proposes that not only schoolteachers but also higher education teachers should "interrogate their own practice and its results in order to continue to connect with students' changing needs" (Day 1999: 218). It follows the advice from James McKernan (2007: 109) that "all teachers, wherever their location in the educational enterprise, have opportunities to learn and to develop professionally through research into their own practice". This research could and should be informed by what others are doing and what results they are getting.

In order to share some working and initially effective methods the article also serves a preliminary report from a pedagogical experiment aimed at addressing

the above concerns within broadly understood political science, International Relations and security studies. The experiment has been conducted during different classes at a university for 3 years and consists of two activities which students take part in. Both activities are team-based role-playing simulations of our reality in which fantastical events unfold – one is a zombie outbreak and the other is an alien invasion. The term 'fantastical' is used here not to exclude any literary genre (like fantasy or science-fiction), but to encompass them all while emphasizing the imaginary, illusory elements created in our minds and not existing in reality. Even though the distinction between genres might be beneficial and should be explored in the future, it would probably not invalidate the conclusions of the experiment and thus is being omitted. These aforementioned imaginary events are utilized in order to teach students the basics of political decision making, negotiations, national and international security dilemmas and concerns as well as numerous soft skills. It follows the "reflective practice" model of teaching proposed by McKernan (2007: 110), based on doing research into one's own teaching methods and being one's own critic. The early results and student opinions are promising, which is the reason for sharing the basic framework for the experiment to be explored and developed by others. In order to provide scientific foundations for this inspiration, the article starts with analyzing the pedagogical potential of popular culture and its niche, fantastical themes like zombies or aliens. It follows with a literature review and exploration of using role-playing and simulations as teaching tools. Then the aforementioned experiment is laid out and its key takeaways and challenges are addressed in order to conclude with the proposal of enhancing existing curriculums with more innovative teaching methods.

The pedagogical potential of specific popular culture themes

It has already been established in the literature that popular culture and all the stories it tells "can be powerful and persuasive vehicles for helping us look at the world in new and different ways and thus can be used by educators to engage students and problematize societal issues" (Jubas, Taber, Brown 2015: 1). Integrating themes from popular culture into teaching at the university level allows the curriculum to "ignite the human imagination" (McKernan 2007: 3), while utilizing innovative methods like role-playing and simulations lets that spark develop into a burning desire to understand the world better.

The idea of using popular culture for teaching about politics and its theory has also been around for a few decades now, although it seems to be still floating around the fringes of political science pedagogy and never making it into every curriculum as a staple. Nevertheless, the proposals given in the available literature have been very interesting and inspiring. One example is Cynthia Weber's (2001) idea of using

popular films to teach IR theory by allowing students to be critical readers and writers of narratives about international politics.

Even wild, fantastical scenarios of zombies prowling the streets or aliens appearing in the sky may serve the same purpose, as the realities – including political realities – they are set in are very often not unlike our own. Nontraditional texts, both written and films, are being successfully used for teaching political science and the teachers emphasize the increase in student involvement and attention compared to studying scientific literature or documents (Stump 2013). Fantastical themes like zombies and aliens which surprise students with their appearance within the classroom make immersing and engaging in the activity easier by inducing an emotional response right from the start. Some scholars have already had great success with zombie outbreaks scenarios for their simulations (Horn, Rubin, Schouenborg 2017).

What is important is that themes like zombies or aliens are already being explored by political scientists and their relevance to political research and theory is established quite well. The researchers do it all: beginning with analyzing the politics of horror (Picariello 2020) and ending with exploring the relation between theories of international politics and zombies (Drezner 2022), joined by some very serious reflections on the political problem posed by alien intelligence (Wendt, Duvall 2008). If these topics are serious enough to be tackled by renowned political scientists as important theoretical issues, nobody should shy away from using them as teaching tools.

The benefits of teaching by role-playing and simulations

Role-playing and simulations have been explored as teaching tools for a long time (e.g. Kidron 1977). However, the popularity of these active learning practices among university teachers is still extremely low and the vast majority of students never experience any lesson thought this way (Archer, Miller 2011). This is unfortunate, given that methods which engage students and give them freedom in the classroom are probably the true education rather than mere training or instruction. They treat knowledge as the foundation for creative thinking without instrumentalizing it (McKernan 2007).

Importantly, educational role-play does not and should not be viewed as entertainment means for learning, even if it has some game elements. If the activity is perceived as too 'gamified' it can have an inhibiting effect on producing novel forms that go further than mere skill acquisition. The experience should thus be a reflective process which enables transcending the knowledge from the game's context to that of its participants (Henriksen 2010). The kind of gamification of teaching achieved through role-playing needs to become "complete ecosystems of goals, challenges, puzzles, and – yes – rewards and punishments, but they all work together to create a player experience that is far more than the sum of its parts" (Johnson, Salter

2023: 30). It transcends the traditional objective-test-grade procedure, emphasizing getting satisfaction through experience rather than a numerical score.

When done correctly, teaching through role-playing simulations has been proven to enhance students' learning in higher education settings (Barrera, Venegas-Muggli, Nuñez 2021). Simulations must provide a grounding narrative in order to capture students' attention for long enough and motivate them to participate, which is easily attainable through role-playing. The make-believe aspect of role-playing "can organize knowledge, increase interest, add relevance, allow for new perspectives, and persuade" (Johnson, Salter 2023: 56). Learning through role-playing in a simulation allows students to conduct their own research while in the classroom – research through narrative inquiry, in which they are both the narrators and the readers of the story of the simulation they co-create (Kramp 2004). Because role-playing and simulations do not have a previously written narrative but only a set of plot hooks through which they develop, students become writers at least as much as readers of the narrative (Weber 2001).

Narrative-based simulations played out in the classroom – not on a PC within a commercial game like *Civilization* or *Age of Empires* – allow for a critical framework through which the world can be analyzed, without forcing the participants into the problematic models embedded within computer games like the savage-civilization dichotomy or conquest-based model of development (Johnson, Salter 2023: 42). At the same time role-playing games – those played in person – have been shown to have various pedagogically relevant benefits like fostering knowledge acquisition, strengthening team building, encouraging collaborative creativity and exploring one's personal development (Daniau 2016). Role-playing in-person without the use of technology is also shown to improve the participants' creativity (Chung 2013). This makes it useful for teaching those political, international and security problems and dilemmas which have no preset solutions and require the formation of original ideas for every specific situation.

Examples of role-playing within or close to political science education are numerous already and the success stories describe using it to come up with new ways to improve cities' resilience (Shearer 2021), teaching civic planning (Gordon, Haas, Michelson 2017), educating about complicated social and political topics like living in a totalitarian system (Kotryová 2017) or an alternative reality (Simpson, Elias 2011), improving critical literacy in order to better the understanding of the world and provide new opportunities for social action (Smith 2014), exploring sustainable development (Buchs, Blanchard 2011; Gordon, Thomas 2018), managing conflicts (Belloni 2008) or just simply learning history (Lee et al. 2014). Simulations and role-play are also being used to play out specific historical political events like the Cuban missile crisis, the intervention in Zimbabwe or Lebanon crisis (Simpson, Kaussler 2009).

Even though role-playing and simulations are somewhat used in higher education, there is still a lot to be explored when it comes to situating them within alternative realities which are copies of our own, but with certain fantasy or science fiction elements added in order to spark even more interest from the students, while still functioning within the socio-natural limits of our own political institutions. Provided the growing interest in those elements within political studies themselves, the combination of simulations *and* fantastical and science fiction themes seems worth exploring and testing. This is what the experiment described in the latter part of the article set out to do.

Methodology and structure of the experiment

The experiment has so far been conducted on a total of 145 students, in classes as big as 34 and as small as 9 students. Since this is a preliminary report, a detailed composition of the group is deemed not important. The gender, age and previous educational experience might play some role in the efficacy of the simulations and will certainly be taken into account in an eventual full report, but so far these variables seemed to not matter much, especially since all student groups taking part in the experiment have been mixed groups of people of all genders, ages and experiences. The courses in which students participated in the simulations were: security policy, international economic and political relations, and contemporary threats to world security.

The experiment has no predetermined set of learning objectives, following the advice of McKernan (2007) that the result-driven model of curriculums based on learning objectives does not allow for imagination to roam free and utilize its educational potential. It is instead supposed to let "students realize that they do have expertise, and that they can think and speak for themselves" (Parisi et al. 2013: 416). Thus, student empowerment and creative development is prioritized more than acquisition of specific knowledge.

Another important principle is establishing the roles of the teacher. It was decided that besides being the planner of the simulation and the information provider during the initial phase, all other roles should be minimized. Thus, it is the students who are the facilitators in this learner-centered enterprise as it is them who devise the details of the narrative framework and it is them who develop the narrative throughout the simulation. The students themselves are also the assessors, only slightly inspired by the teacher in order to summarize the exercise and to propose interesting conclusions.

The simulations all follow the same basic structure, which is being improved over time with every iteration of the experiment. This structure consists of:

- introduction and notice that the students are taking part in a pedagogical experiment,
- dividing students into teams and establishing goals,

- preliminary round for preparations,
- variable number of rounds to run the simulation,
- conclusion and feedback.

The introduction is a key step of the simulation. It has to catch the students' attention and tease their imagination, which is why the fantasy or science fiction themes of zombies and aliens were chosen. It also sets up the task and expectations by emphasizing that the simulations will challenge the students' creativity and problem-solving, not their memory or knowledge acquisition. Unlike simulations described by Laura Horn, Olivier Rubin and Laust Schouenborg (2017), the experiment does not require any prior preparation from the students. They come into the simulation with what knowledge they have at the moment with the intention of diffusing this knowledge among them, with the occasional Google search on their phones during any phase when necessary.

The simulation is being run in two different scenarios which set up the narrative framework, but not the narrative itself. The scenarios are a zombie outbreak or an alien invasion. Students are divided into teams, where one team is responsible for the zombies or aliens and the other teams are either alternate versions of the students' home country, functioning in parallel realities, or they are specific countries of the world that function within the same reality (i.e. the US, China, the EU etc.). There are no guidelines regarding the nature of the threats, so it is always the team responsible for the threat that decides where the zombies/aliens come from, how they function, what are their strengths or weaknesses etc. In both scenarios the students usually force each other to take into account every and any aspect of politics and security, be it institutional, legal, military, environmental, economic, social, health, infrastructure, information, diplomacy etc. Even if the initial plot hooks do not touch on each of these issues, the team responsible for the challenge reacts to the solutions proposed by other teams and by finding their weaknesses and omissions forces them to think about new aspects of the problem after each round. This is because the simulation is geared more towards the process than the content (Asal, Blake 2006).

The main rounds of the simulation are when the perception of new stimuli and the acquisition of new skills happen. The teams get a few minutes to discuss their next moves in private and then declare their actions aloud as each round concludes. In the zombie scenario the interaction between teams is narratively dressed as getting progress in research conducted in imaginary institutions which study the zombies. The challenged teams get to ask questions which the zombie team answers about the nature and development of the threat. In the alien invasion scenario, the interaction is either similar (if the aliens do not want to communicate with Earthlings) or takes the form of negotiations between Earthly parties and the aliens. This is usually when ideas about overt cooperation, secret alliances or treachery happen. Because the exercise is learner-centered this is driven by students' choices and actions themselves, as long as they follow the structure laid out

in the introduction. The teacher's guidance and supervision have proven not necessary so far apart from being the one who controls the passing time and announces that the simulation is going into another phase. What is important is that the teacher does not have to be the role model of this learning experience, as the necessary role models appear among the students themselves – the team which best fits into the simulation, grasps the problems most holistically and is most creative in its solution becomes the role model for the others to follow. The rounds do not have any predetermined sets of actions that the teams can make, nor do the actions proposed require any approval from the teacher unlike in other simulations presented in the literature (e.g. Asal, Blake 2006). Thus, the challenges given by the team responsible for them differ a lot in scale and character and the solutions given by other teams need to match them on the fly as they appear, always unexpected.

The conclusion is when the teacher and the students recall and synthesize the whole narrative created during the specific simulation and follow by formulating key conclusions. The students are able to do it mostly by themselves, which lets one be optimistic about the retention of learned skills. The students are also asked for feedback and tell the teacher their subjective opinion about the new skills they had gained as well as the level of entertainment during the exercise. They are also asked if they find exploring such fantastical scenarios worthwhile and relevant to their field of study. This feedback serves as the basis for the teachers' self-evaluation after every simulation in order to find ways to improve in some areas, such as underplanning and overplanning, class control, communication, clarity of objectives and so on. Importantly, the proposed activity is not supposed to be graded and thus there is no need to devise specific game theory for specifying winners and losers or optimal strategies (Bolton 2002).

Key takeaways and challenges

Teaching through such team-based narrative role-playing simulations allows for the blurring of the traditional "division of labor" in education between academics and teachers, because even though a university professor is both at the same time, they only either "do research" or "teach" but rarely do both at the same time and place. By being a reflective practice, it enables the professor to research their own teaching practice. It blurs the division of labor even further by allowing students to drive the simulation and form new challenges for their peers within the structure laid out by the teacher, transforming the educational process into a fully democratic one (McKernan 2007). Because the simulation is team-based it does not put excessive pressure on the cognitive skills of individual students, as any weaknesses – i.e. trouble with recalling knowledge or developing new intellectual skills to overcome problems – that a single student possesses are usually covered by other team members. This diffusion of intellectual labor required to solve unexpected problems always

produces satisfactory results. There was never a case during the experiment where a team was severely lagging behind others when it came to providing innovative and interesting solutions and answers.

What is important is that this style of teaching does not belong to the "popstar/entertainer" model described by Weber (2001: 281), where playing too much into the students' interests and expectations must be accompanied by a very distinct and rare skillset of the teacher, otherwise they fail miserably. Because the simulations are run by the students themselves, as long as the teacher follows a kind of simple structure – like the one presented in the article – the demands for creativity and charisma are relegated from the teacher to the student teams. The teacher's main responsibility is controlling the tempo of the simulation and observing in order to reflect on the activity and improve it in later iterations. At the same time, by utilizing themes from popular culture the activities are relevant to the students' experiences, while still being valid and reliable to the major objectives of the whole course because the simulations reflect actual political entities, institutions, laws etc.

What surprised the author was the feeling of empowerment observed among the students and often voiced by them during the feedback phase. Especially the zombie apocalypse scenario allowed the students to reflect on their actual experiences and knowledge, resulting in creating numerous political, institutional, legal, cultural and other solutions, which they could then compare to the actions undertaken by governments during the COVID-19 pandemic. Very often were the students amazed and proud of themselves, as in the very short time frame of the simulation they were able to think up logical and rational solutions, in contrast to their real world experience of indecisive and slowly moving governments, somewhat proving that role-playing is an effective method to forecast decisions (Armstrong 2001). The experiment has also proven that learner-centered alternative methods, like the one presented here, create conditions in which "activating the students in creative ways often leads to realizations that they have expertise and something to give back to the world" (Parisi et al. 2013: 414).

The experiment does have its challenges which should not be left unsaid. The first one is the proper allocation of time during the simulation in order to fit it into a 90-minute lesson which still gives a sense of accomplishment without too many narrative loose ends. Usually this means three main rounds, which do not always end with a clear achievement of any group. This is why the students need to know that it is the process not the goal which is important here. The second one is the difficulty of measuring the attainability of any learning objective, because the simulations are open-ended and do not yet have any scoring system. Moreover, because its framework is so loose and the teams do not have any resource pools to take into account or specific sets of actions they can take and evaluate easily (Asal, Blake 2006), the outcomes are never structured and often surprising to all participants. This is both a strength and a weakness, but the teacher should be aware of this before deciding on using

such a strongly student-driven simulation. It does require a lot of trust in one's students and their openness and creativity.

Another possible weakness is that the relative simplicity of the simulation's structure requires the teacher's control over moral and ethical detours that the narrative can unexpectedly follow. Such situations may occur when a charismatic student proposes political solutions which sound 'fun' and provide comic relief, but would be morally very unwanted in real political situations – for example providing the invading aliens with human test subjects yanked from poor city districts in exchange for weapons technology. This forces the teacher to make a choice of either disallowing such narrative developments or ensuring that every participant is fully aware that they are there only to provide entertainment for the group and instigating a short discussion about why they should never happen in reality. This kind of teacher oversight is nevertheless necessary during many traditional educational activities anyway, although it becomes especially important in a role-playing setting due to its high potential impact on moral development of the participants (Wright, Weissglass, Casey 2020).

One could also point out that any teaching through role-playing and simulations neither has a guaranteed efficacy nor the critical thinking skills they develop can be overtly transferable to typical assessments (Johnson, Salter 2023: 56). The experiment proposed here is not free of such considerations and thus should not be the main teaching tool within a course, but a supplementary one. It is notably less structured than most similar simulations described in the literature. It resembles the simulation proposed by Horn, Rubin and Schouenborg (2017), although the small differences matter a lot. First, the experiment does not require any prior research from the students – neither during classes nor as homework. This becomes an advantage in class settings in which students usually slack on their homework. Second, it is not intended to teach theory and thus the students are not required to frame their narratives into any specific theory of politics or international relations, which goes against some established recommendations (Asal, Kratoville 2013). If any of the narratives fit into a theory, it is the teacher's will to mention it to the students and in this way expose them to theory through the simulation, not the other way round. Third, unlike the simulations of Horn et al. (2017) the threats here are not predetermined and their exact nature depends on the imagination of the students. Because of this there is no apparent advantage that some students would have only because they had watched a specific movie that the narrative is based on.

The experiment described in the article is a work-in-progress and demands a lot of improvements. The lack of a clear structure is both an advantage and a problem. The narrative has a chance to get off track and not fit well into existing curricular content. This is why the author is already thinking about incorporating elements from existing board games and/or tabletop role-playing games. The peer feedback received so far has also suggested such measures. These could be 'character sheets' transformed into 'state sheets' or 'ministry sheets', containing basic information,

capabilities and resources of each player. Some kind of resource and time markers could also be utilized in order to provide a physical basis for the imaginary narrative to build onto. Another possibility is encouraging the students to try to adhere to specific theories (e.g. "think like a realist" or "think like an idealist") and rewarding the ones which do it best – not unlike rewarding players of traditional tabletop role-playing games who best act out the personalities and backgrounds of their characters.

Even though the experiment has no in-build evaluation mechanism, it should be noted that the students have unanimously judged it positively during each feedback phase and wrote only positive opinions through the university's anonymous course evaluation system. The phrases used were: innovative, interesting, engaging, a great experience, worth copying by other lecturers, creative, stimulating, effective, original. This brings personal joy to the teacher, but also poses genuine didactic challenges. No specific way of evaluation makes this more of an interlude activity to be used once or twice a year between 'traditional' classes and not something that the final grade can be based on. This could be avoided by introducing any kind of simple scoring system, although the risk is that the students will focus too much on the numbers they need to achieve to "win" or be better than their peers, rather than on creatively solving problems simply to see how their decisions unfold and making conclusions from that.

Conclusion

The need for more teacher training and popularization of alternative teaching methods at the university level is clear, yet there are obstacles to providing such training (Trowbridge, Woodward 2021), the easy-to-use innovation provided here could possibly be very welcome. The incentive to try it would be the fact that the methods suggested in the article have very little requirements and practically run themselves. And if university professors usually have little to no knowledge of what their peers do in their own classrooms (Hartlaub, Lancaster 2008), sharing pedagogical insights through easily accessible texts like this one might motivate the community to share more well working tools among each other. The author will be more than happy to share some of the example scenarios which have unfolded during the experiment, especially since their inclusion in the article is impossible due to space limitations.

Team-based role-playing simulations – as exemplified by the experiment described here – do not have to become staples in every curriculum within political science, IR or security studies courses, but it seems prudent to at least try to utilize the modern students' vivid and fecund imagination in order to better align teaching methods to the young people's intellectual needs. By blending popular culture and simulations into the teaching process and weaving a story together the teacher and the students become conscious artists, working together to "supplement, enrich and extend [their]

powers of judgment" (McKernan 2007: 116). During such role-playing simulations students really do "become *active* critical interpreters and indeed writers of their worlds […] rather than passive recipients of these worlds and of the truths that construct them" (Weber 2001: 286).

Teaching through in-person role-playing simulations is not dependent on any technology or technical skills, requiring only the space of the classroom. It thus bridges the gap between many teachers and their tech-savvy students, requiring only personal communication skills unlike the many other attempts of pedagogy gamification through computer software (Johnson, Salter 2023: 28). Using the popular culture themes in the simulations further utilizes the students' immersion in the many virtual worlds and their ability to conjure new worlds, which is a skill they acquire during their free time anyway. Moreover, because every simulation plays out differently, the method works wonders to avoid teacher burnout by becoming the reader of the amazing and always original narratives woven by the students, instead of doing the exact same classroom activity year after year.

Bibliography

Archer C.C., Miller M.K., 2011, *Prioritizing Active Learning: An Exploration of Gateway Courses in Political Science*, "PS: Political Science & Politics", Vol. 44, Issue 2.

Armstrong J.S., 2001, *Role Playing: A method to Forecast Decisions*, in: J.S. Armstrong (ed.), *Principles of Forecasting*, New York.

Asal V., Blake E.L., 2006, *Creating Simulations for Political Science Education*, "Journal of Political Science Education", Vol. 2, Issue 1.

Asal V., Kratoville J., 2013, *Constructing International Relations Simulations: Examining the Pedagogy of IR Simulations Through a Constructivist Learning Theory Lens*, "Journal of Political Science Education", Vol. 9, Issue 2.

Barrera F., Venegas-Muggli J.I., Nuñez O., 2021, *The impact of role-playing simulation activities on higher education students' academic results*, "Innovations in Education and Teaching International", Vol. 58, No. 3.

Belloni R., 2008, *Role-Playing International Intervention in Conflict Areas: Lessons from Bosnia for Northern Ireland Education*, "International Studies Perspectives", Vol. 9, No. 2.

Bolton G.E., 2002, *Game theory's role in role-playing*, "International Journal of Forecasting", Vol. 18, Issue 3.

Buchs A., Blanchard O., 2011, *Exploring the Concept of Sustainable Development Through Role-Playing*, "The Journal of Economic Education", Vol. 42, Issue 4.

Chung T., 2013, *Table-top role playing game and creativity*, "Thinking Skills and Creativity", Vol. 8.

Daniau S., 2016, *The Transformative Potential of Role-Playing Games: From Play Skills to Human Skills*, "Simulation & Gaming", Vol. 47, Issue 4.

Day Ch., 1999, *Researching Teaching Through Reflective Practice*, in: J. Loughran (ed.), *Researching Teaching: Methodologies and Practices for Understanding Pedagogy*, London–Philadelphia.

Drezner D., 2022, *Theories of International Politics and Zombies*, Princeton – Oxford.

Gordon E., Haas J., Michelson B., 2017, *Civic Creativity: Role-Playing Games in Deliberative Process*, "International Journal of Communication", Vol. 11.

Gordon S., Thomas I., 2018, *'The learning sticks': reflections on a case study of role-playing for sustainability*, "Environmental Education Research", Vol. 24, No. 2.

Hartlaub S.G., Lancaster F.A., 2008, *Teacher Characteristics and Pedagogy in Political Science*, "Journal of Political Science Education", Vol. 4, Issue 4.

Henriksen T.D., 2010, *Moving Educational Role-Play Beyond Entertainment*, "Teoría de la Educación: Educación y Cultura en la Sociedad de la Información", Vol. 11, № 3.

Horn L., Rubin O., Schouenborg L., 2017, *Undead Pedagogy: How a Zombie Simulation Can Contribute to Teaching International Relations*, "International Studies Perspectives", Vol. 17, Issue 2.

Johnson E.K., Salter A., 2023, *Playful Pedagogy in the Pandemic: Pivoting to Game-Based Learning*, London–New York.

Jubas K., Taber N., Brown T., 2015, *Introduction: Approaching Popular Culture as Pedagogy*, in: Jubas K., Taber N., Brown T. (eds.), *Popular Culture as Pedagogy: Research in the Field of Adult Education*, Rotterdam–Boston–Taipei.

Kidron A.G., 1977, *The Effectiveness of Experimental Methods in Training and Education: The Case of Role Playing*, "The Academy of Management Review", Vol. 2, No. 3.

Kotryová L., 2017, *Project System: totalitarian utopia as a role-playing game*, "World Journal of Science, Technology and Sustainable Development", Vol. 14, No. 2/3.

Kramp M.M., 2004, *Exploring Life and Experience Through Narrative Inquiry*, in: deMarrais K., Lapan S.D. (eds.), *Foundations for Research: Methods of Inquiry in Education and the Social Sciences*, Mahwah–London.

Lee G.H., Talib A.Z., Zainon W.M.N.W., Lim C.K., 2014, *Learning History Using Role-Playing Game (RPG) on Mobile Platform*, in: H. Jeong, M.S. Obaidat, N. Yen, J. Park (eds.), *Advances in Computer Science and its Applications. Lecture Notes in Electrical Engineering*, Vol. 279, Berlin–Heidelberg.

McKernan J., 2007, *Curriculum and Imagination: Process Theory, Pedagogy and Action Research*, London–New York.

Parisi L., Allison J.E., DaLaet D., Penttinen E., Rytkønen H., Schemenauer E., Sharoni S., Smith H.A., 2013, *Innovating International Relations Pedagogy: Critical Feminist Engagements*, "International Feminist Journal of Politics", Vol. 15, Issue 3.

Picariello D.K. (ed.), 2020, *The Politics of Horror*, Cham.

Shearer A.W., 2021, *Roleplaying to Improve Resilience*, "Architecture_MPS", Vol. 18, Issue 1.

Simpson A.W., Kaussler B., 2009, *IR Teaching Reloaded: Using Films and Simulations in the Teaching of International Relations*, "International Studies Perspectives", Vol. 10, Issue 4.

Simpson J.M., Elias V.L., 2011, *Choices and Chances: The Sociology Role-playing Game—The Sociological Imagination in Practice*, "Teaching Sociology", Vol. 39, Issue 1.

Smith K., 2014, *Critical Hits & Critical Spaces: Roleplaying Games and Their Potential in Developing Critical Literacy and New Literacy Practices*, in: P. Paugh, T. Kress, R. Lake (eds.), *Teaching towards Democracy with Postmodern and Popular Culture Texts*, Rotterdam–Boston–Taipei.

Stump J.L., 2013, *Exploring Politics and Government With Popular Culture: Justifications, Methods, Potentials, and Challenges in Introductory Political Science Courses*, "Journal of Political Science Education", Vol. 9, Issue 3.

Trowbridge D., Woodward J., 2021, *Pedagogy training among political scientists: Opportunities, interest, and obstacles*, "Journal of Political Science Education", Vol. 17, Issue 1.

Weber C., 2001, *The Highs and Lows of Teaching IR Theory: Using Popular Films for Theoretical Critique*, "International Studies Perspectives", Vol. 2, No. 3.

Wendt A., Duvall R., 2008, *Sovereignty and the UFO*, "Political Theory", Vol. 36, Issue 4.

Wright J.C., Weissglass D.E., Casey V., 2020, *Imaginative Role-Playing as a Medium for Moral Development: Dungeons & Dragons Provides Moral Training*, "Journal of Humanistic Psychology", Vol. 60, Issue 1.

Biogram

Dr Piotr Walewicz – politolog na Wydziale Nauk o Polityce i Administracji Uniwersytetu Kazimierza Wielkiego w Bydgoszczy. Jego zainteresowania naukowe obejmują m.in. teorię stosunków międzynarodowych, analizę dyskursu naukowego, ekolingwistykę, koncepcję world-ecology oraz międzynarodową politykę ekologiczną.

Dr Piotr Walewicz – is a researcher at the Faculty of Political Science and Administration at Kazimierz Wielki University in Bydgoszcz, Poland. His research interests include, among others, international relations theory, scientific discourse, ecolinguistics, the concept of world-ecology and international environmental policy.