

## **iCIVICS: HOW CAN ONLINE GAMES WORK IN HIGHER EDUCATION?**



**ZSÓFIA ILLÉS**

Budapest University of Technology and Economics  
Egry József Street, 1, Budapest, 1111, Hungary  
**E-mail address:** illes.zsofi@filozofia.bme.hu

**KRISZTINA SZABÓ**

Budapest University of Technology and Economics  
Egry József Street, 1, Budapest, 1111, Hungary  
**E-mail address:** kriszti.szabo@filozofia.bme.hu

**ALEXANDRA SZEMERE**

Budapest University of Technology and Economics  
Egry József Street, 1, Budapest, 1111, Hungary  
**E-mail address:** szemere.szandra@filozofia.bme.hu

### **ABSTRACT**

Could online games work for adults in Higher Education, for instance in teaching Argumentation Theory? We chose iCivics as our case study, which is basically an on-line education assisting program. iCivics was created by Sandra Day O'Connor and has been applied since 2009 throughout the USA. The online gaming program is designed for middle and high school students for developing their argumentative writing skills. It seems that the iCivics' goals are the same as ours. As practising teachers we experience that the attainment of Argumentation Theory is difficult for students, even for those who are mastering in Communication Studies. We focus on the question whether iCivics is applicable in Higher Education, and how. In our research<sup>66</sup> we critically analyse iCivics based on a constructivist standpoint elaborated by McGonigal (2011, in: Buck 2013), Andrea Kárpáti (2008), Sue S. Wingfield and Gregory S. Black (2005) and Jonh Biggs, Catherine Tang (2007). As a final aim we would involve fellow argumentation teachers in the methodological development of argumentation courses.

**Keywords:** iCivics, Online Games, ICT tools, Higher Education Development, Teaching Argumentation

---

<sup>66</sup> This ongoing research is conducted in the framework of Integral Argumentation Studies, OTKA - K-109456 at the Doctoral School of Philosophy and History of Science, Budapest University of Technology and Economics.

## INTRODUCTION

The most essential elements of communication are the theory and method of Argumentation. Living in a society, we should know how to phrase our thoughts, how to defend or criticize one's standpoint in a certain topic and how to build up a proper argument in order to discuss not only questions of everyday life, but also the major theoretical and practical points of science, democracy, life and so forth.

It follows from the above that developing our argumentation skills is a very important task, particularly in the fields of Higher Education. As practicing Higher Education teachers we can say that students have difficulties in arguing, making clear standpoints and expressing themselves in the proper way. This problem exists even for those students who study Communication and Media Studies. We claim that the key to solving the problem of developing students' argumentation skills lies in the teaching methods. Therefore, we must be addressed to this topic much more seriously than at present, because the next generation will be the one who will have to solve the problems of the future – which process needs a correct and confident usage of Argumentation tools.

The question arises: how can we make the educational materials and techniques of Argumentation Studies more effective and engaging? In our research we started from the idea of gamification, which is a very promising notion in contemporary education. Our main question is whether online games work for adults in Higher Education, for instance in teaching Argumentation Theory? As a case study, we chose an online educational assisting program called iCivics, created by Justice Sandra Day O'Connor. With a critical analysis, we investigated one specific game of iCivics' called Argument Wars in order to decide whether it is applicable in Higher Education; and if it is, then how.

In this paper first we will present our research aims, methods and theoretical background. Secondly, we will summarize the main points and characteristics of iCivics program. Then we will narrow the focus and concentrate on the Argument Wars game. Based on a constructivist standpoint elaborated by McGonigal (2011, in: Buck, 2013), A. Kárpáti (2008), S.S. Wingfield and G.S. Black (2005) and J. Biggs, C.Tang (2007), we will make an analysis about Argument Wars and its possibilities in Higher Education. Finally, after concluding and discussing our main results, we will give some ideas of possible further researches. We recommend our research and its results to the fellow argumentation teachers who would like to take part in the methodological development of Argumentation courses.

## AIM OF THE STUDY

The aim of our study is to be able to train well prepared debaters, critical thinkers at a Higher Educational level. Precisely, we want to develop the university students' ability of critical thinking, their argumentative skills – both oral and written skills and also help them to achieve a level where they are able to use these newly obtained skills in real life situations effectively. Instead of the

traditional frontal teaching method we chose the model of Constructivist Pedagogy. Even though we still partly include the passive teaching style during our classes, we are already practicing the active teaching method by using board-games and other types of regular games. However we would like to broaden our set of tools by involving online games as well. At this point we started to focus on the gamification of our Argumentation courses.

### THEORETICAL BACKGROUND

“By definition, gamification means using the mechanics, rules and techniques known from various kinds of games (including board games, role-playing or computer games) in non-gaming contexts to increase user’s engagement in performing various types of activities, especially if those activities are considered boring or routine ” (Laskowski, & Badurowicz 2014, p. 972).

The question arises why games? Everyone likes to play some kind of games, whether they are board, online or video games. As we reviewed in the relevant and related current Argumentation technique and teaching methodology literature (i.e. Alexander, 2014; Brandenburg, & Wilson 2013; Andrews, 2010; Buck, 2013; DeHaven, & Ferebee, 2012; Fry, Ketteridge, & Marshall, 2008; Hastings, 2009; Marks, 2014; Race, 2006; Ruben, 1999; Squire, & Mingfong 2007), we found that games are not only for children. We know that games “are enjoyable, and interactive and learners respond naturally to this type of dynamic” (O’Riordan, & Kirkland, 2008, p. 2). Of course “we normally think of games as being fun, kind of trivial, maybe something to pass the time, but what if we thought about them as a platform for inventing the future of higher education?” (McGonigal, 2011, in: Buck, 2013). This idea is important for us, because it can easily connect with the contemporary education method, namely the active teaching method. The active and constructive processes of the game, to learn the rules, to learn the spatial orientation of the game and to conceive tactical moves serve social upbringing and learning from childhood. McGonigal’s question seems to be adequate, especially if we frame into the theories of active learning processes. “So if it [game] is an effect and engaging learning tool for children, there is no good reason why it should not work for engaging and developing learning in adults” (O’Riordan, & Kirkland, 2008, p. 1). From this idea we think that games, which are made for the curriculum, can be effective teaching tools and methods in the teaching of argumentation. We think of the games as the tool for the acquirement, understanding and intensification of the curriculum. As Meier says the “right game for the right audience at the right time can make learning fun and interesting, can provide a helpful review that strengthens the learning, and can even act as a kind of test and measure of learning” (Meier, 2000, p. 148).

Regarding the effectiveness of games we found that they “can be interesting, clever, fun and very engaging” (Meier, 2000, p. 147). Fiona O’Riordan and Deborah Kirkland pointed out in their paper, that the students found the different types of games enjoyable, interactive, and they gave very positive feedback. Another question arises: how do the players behave during playing the games?

Justin Marquis uses McGonigal's four point of view about the players in higher education. The first point is the (1) "urgent optimism", which means that the players think they really have the chance to solve the problems that the game gave them. They build (2) "social fabric" for the cooperation. The time what they spend with the game is a (3) "blissful productivity", they feel they are part of a larger event where their decisions gain spectacular meaning, their activities gain (4) "epic meaning". (Marquis, 2011). Usually that is why people like to play in their free time: they would like to feel the above mentioned qualities. According to J. Marquis (2011) these four points should play a part of creating the lessons or lesson plans. Games which are shaped for the curriculum „[...] offer an opportunity to promote collaboration and foster active learning" (O'Riordan, & Kirkland, 2008, p. 3). It is important for us to achieve the active learning process, where the game can be a relevant tool.

### RESEARCH METHOD

In our courses we already use regular games, especially board games, but starting from the previously mentioned assumptions we searched for online argumentative, debating and reasoning games for educational purposes. We have found Argument Wars, which is an online game of the iCivics Program.

Following a background check on iCivics Program, we focused on the Argument Wars. In our secondary theoretical research we critically analysed this game based on the forthcoming viewpoints: the promises of the game and its results, Constructivist Pedagogy model and Higher Educational purposes.

### ABOUT ICIVICS

iCivics is a non-profit constitution founded and launched in 2010 by Sandra Day O'Connor, a retired Associate Justice of the United States Supreme Court. iCivics provides an online program for educational purposes. The mission of iCivics is the following: "We envision a nation where all young Americans are prepared for active and intelligent citizenship. To support this vision, iCivics empowers teachers with effective and engaging resources to develop the next generation of citizens" (Our Story. iCivics, 2010). In order to reach these goals, the program offers lesson guides and tasks to teach and develop children's argumentative and persuasive writing skills, comprehension, literacy and critical thinking to make them able to take part in the American democracy in an intelligent, comprehensible and active way. To be aware of the working mechanisms of democracy, government, politics and all of the basic documents of America, should be an essential part of American education. In order to teach children this knowledge iCivics provides a kind of visual learning method based on several role playing and online simulation games, with the promise of engaging learning, clever entertainment and real-time feedback. "iCivics is what school should be. It should be an engaging experience when you are part of the action, you make those choices, and you decide what happens and you learn the result of that process" (iCivics, 2015, MacArthur Award Recipient, YouTube video, 2015:03:07).

The program has online materials for teachers and students for learning about government and civic possibilities through games, free lesson plans and interactive modules. This game-based learning declares itself as an entertaining and fantastic way of learning for Middle and High School students. "The lessons help set the context for the discussion, provide resources such as PowerPoint presentations and videos for students to watch, suggest supplementary readings, and offer meaningful activities for students to complete. As they navigate their way through these resources, students learn that "there's a difference between 'arguing' and making an argument in support of a position, and that making an argument is a learned skill that doesn't depend on how you feel about an issue" (Wormeli, 2012).

The materials of iCivics consist 16 Games, 11 Webquests, 50+ Lesson Plans, 12 Curriculum Units and Impact Projects (Wormeli, 2012). With these free lesson plans, Drafting Board and interactive games iCivics aims at an understanding of real-world problems and occupying with them in individual, small groups as well as whole-class learning groups with active participation and collaboration (Help Desk. iCivics, 2009).

Reviewing the materials of iCivics (i.e. Kozlowsky, 2014; Tomaszewski, 2013) we realized that the program seemingly does not provide any principal educational methodological background, therefore we need to make a deeper research into it, which will be one of our main questions.

### ARGUMENT WARS

As mentioned above, iCivics has 16 different games including the one we chose to analyse: Argument Wars. Argument Wars was designed for 6-12<sup>th</sup> grade students. It is based on nine Supreme Court cases that the player can debate his/her way through. The player takes one of the case's standpoints, representing the attorney or the prosecutor. The game offers a selection of backings, warrants that one can use to strengthen one's standpoint. Also, there is a "Judge" who decides whether the warrant

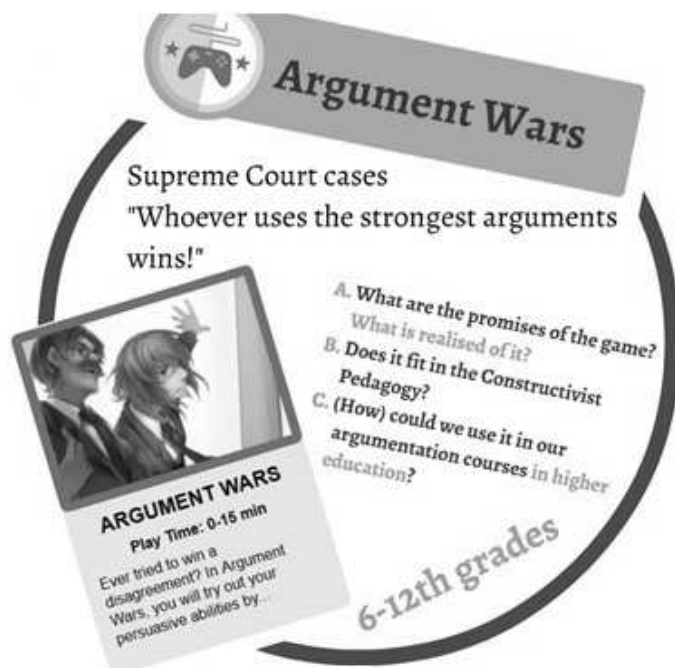


Fig. 1. Research questions.

Source: Original illustration created by the authors (based on Argument Wars' visual elements by iCivics).

is relevant or not. (We will evaluate the quality of this feedback in point C.) Based on the “Judge’s” decisions a set of points are divided between the lawyers. Whoever gets more points, wins.

In the game description we can read the following sentence: “Whoever uses the strongest arguments wins” (Argument Wars. iCivics, 2010). This game and its description caught our interest, thus we phrased three important questions to focus on.

- A. What are the promises of Argument Wars and what is realised of them?
- B. Does it fit into Constructivist Pedagogy?
- C. (How) could we use it in our Argumentation courses in Higher Education?

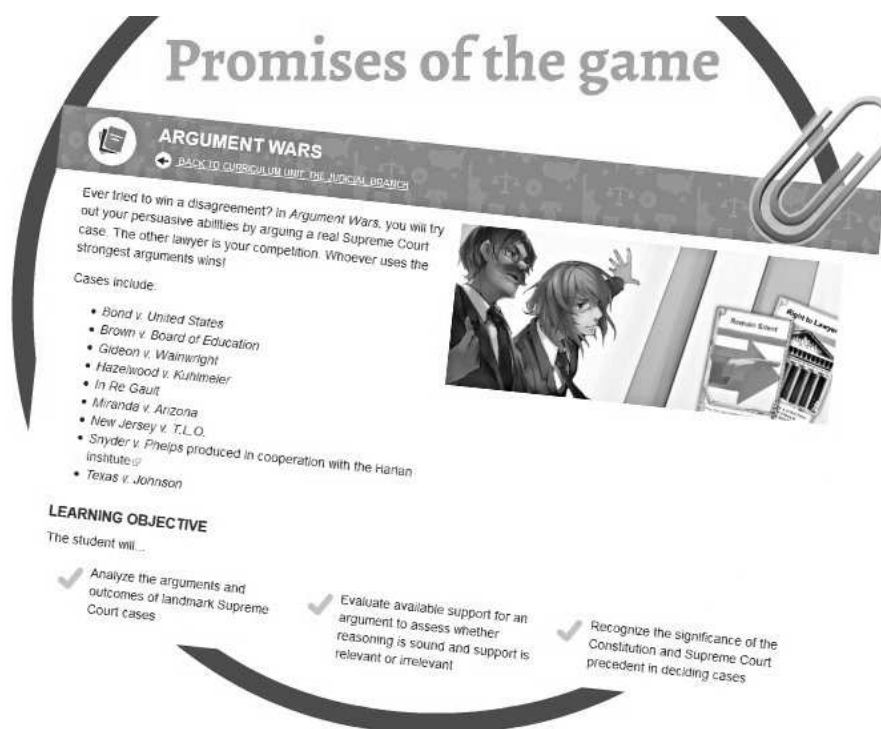
### A. What are the promises of the game and what is realised by them?

Starting with the first question we found the promises in the game description. iCivics says that by playing with Argument Wars the students will 1. “analyse the arguments and outcomes of landmark Supreme Court cases”, 2. “evaluate available support for an argument to assess whether reasoning is sound and support is relevant or irrelevant” and 3. “recognise the significance of the Constitution and Supreme Court precedent in deciding cases”. (Argument Wars. iCivics, 2010) In the very specific framework that iCivics created for this game, Argument Wars works perfectly. It does fulfil the promises it makes. However, regarding the age, knowledge etc. differences between a 6<sup>th</sup> and 12<sup>th</sup> grade students, playing the game seems quite easy for a 12<sup>th</sup> grader. One can walk through this game relying entirely on luck. This means that there is no need to really concentrate on the selecting processes required in the game – one can still win without. Because of this, from a certain age, knowledge or lack of interest Argument Wars may be less fun and less engaging for the students. Therefore, the game will not fulfil its purposes.

Whether or not we would like to apply this kind of game in our Argumentation courses, we will need to consider this aspect of the game design.

### Fig. 2. Game description.

Source: Original illustration created by the authors (based on a screenshot from Argument Wars by iCivics)



### **B. Does it fit into the Constructivist Pedagogy?**

In our study the dominant frame is the constructivist teaching and learning model, which uses different kinds of alternative teaching tools, based on collaboration and cooperation, built on the common knowledge of students and teachers. „It was traditionally regarded as- and it is prevalent today in many places - a learning method, if the student memorizes or practises and exercises” (Nahalka, 2014, p. 40). From the turnout of the different kinds of alternative pedagogies the activity system - which helps and serves the learning process - expands. Those activities which turn up in everyday life arise in the education and became a process of learning (Nahalka, 2014). This concept says that gathering knowledge is permitted during social activity (Kárpáti, 2008). This process can be incorporated into the gamification of teaching Argumentation, if we consider it as an active method, which is mutually developed with the students. For us, games mean those alternative tools, which help education and which we can use with different type of students. “Is active learning more effective?” (Wingfield, & Black, 2005, p. 120). According to J. Biggs (2007, p. 10) the differences between the students are reduced if we use the active teaching method. We think that the gap between the students that arises from the active and passive teaching method, could be reduced by using different kinds of games. We collected the main points of the Constructivist perspective from the gamification point of view. The criteria that should be fulfilled in order to reach the goal of the game are deeper understanding of the learning materials, transferring knowledge etc. We regard games as learning tools not as some activities to pass the time.

According to Dave Meier, a game should have the following characteristics:

1. Be related directly to the workplace.
2. Teach people how to think, access in information, react, understand, grow, and create real-world value for themselves and their organization on a continuing basis.
3. Be as enjoyable and engaging as possible without striking people as being silly or superficial. (Games that appear shallow and childish can turn people off).
4. Allow for collaboration among learners. (Any competition in a game should be between teams and not individuals).
5. Be challenging, but not to the point of frustration and disconnect.
6. Permit ample time for reflection, feedback, dialog, and integration.

(Meier, 2000, p. 148)

We analysed the Argument Wars game from the Constructivist point of view. Our criticism focuses on the characteristics above. We found problems regarding the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 6<sup>th</sup> points. First of all playing the game does not require thinking and understanding. The same result can be achieved whether the student focuses on solving the case by thoroughly deliberating his/her options, or just playing by clicking aimlessly. The teacher would not be able to tell from the result paper he/she gets after the game is over that which was the case. Neither does it help you to develop your skills.

The next problem was already mentioned in point A. The variable ages of the students could influence the effectiveness of the game: “the right game for the

right audience at the right time can make learning fun and interesting, can provide a helpful review that strengthens the learning, and can even act as a kind of a test and measure of learning” (Meier 2000, p. 148).

Regarding the next criteria it seems there is only limited interaction during the game. It means that the children interact, but only with the computer, not with each other. There is no collaboration among the learners.

The last criticism involves feedback. We found that the items of feedback are not completely satisfying. They are not for improvement, as in they do not tell us why our arguments or moves are good or wrong (see further explanation in point C).



Fig. 3. Argument Wars from the Constructivist viewpoint.  
Source: Original illustration created by the authors

### C. (How) could we use it in our Argumentation courses in Higher Education?

Our third question was whether iCivics is suitable to Higher Educational purposes. Having analysed the game of Argument Wars we can say that it has much more limited possibilities that we need in BA and MA level of educa-



tion. Argument Wars is only about legal debates which is just one of several argument types, for instance rational argument or dispute. That is why it is too simple to fulfil our aims of teaching Argumentation. Another problem for us is the limitation of feedback, as mentioned above. Literally, the game gives no real feedback which can help the students to understand the pros and cons of a statement, to see the reason for a rejection, or even to figure out what were the weak points of their argument. The “Judge” of the game selects from always the same three or four types of reactions (see Fig. 4.), and his explanations are not very well-formed and developed. Instead of giving the possibility of an intelligent and fruitful debate, the “Judge” often

punishes the reasoning of the player who contradicts or confutes the argument of the opponent. Punishing includes point reducing and verbal violence as well (see Fig. 5). In our view this kind of reaction is not sufficient in Higher Education, nor in grades 6-12<sup>th</sup>. To take away the possibilities of a real argument and repel almost every opposing opinion with constant threat is not the right way of developing anyone’s argumentation skills, particularly of children’s. It follows from the above that Argument Wars in its present form is not the kind of game that meets our requirements for use in our Argumentation courses at the university.

Fig.4. Example of the reactions of the “Judge”



Source: Screenshot from Argument Wars by iCivics

Fig. 5. Example of verbal violence used by the “Judge”



Source: Screenshot from Argument Wars by iCivics

## CONCLUSION

After discussing our three questions in detail, we should revise our aims mentioned in the beginning. We would like to train well prepared critical thinkers and debaters on a Higher Educational level. The knowledge they acquire should be immediately usable in every real-life situation. We decided on the Constructivist Pedagogy method as our perspective for this research. The reason why we have chosen the Constructivist Pedagogy is because gamification can perfectly fit into it. We are already partly using games during the classes, but we are short on online games that we should also involve. This idea was the root cause for the project we described above.

During the process of looking for already existing online argumentation games, we found Argument Wars and iCivics, the game's framework program. We decided to critically analyse Argument Wars as a possible game to include in our Argumentation courses at the university. The games description inspired three pivotal questions:

- A. What are the promises of Argument Wars and what is realised of it?
- B. Does it fit into the Constructivist Pedagogy?
- C. (How) could we use it in our Argumentation courses in Higher Education?

We found that Argument Wars - as it is - is not able to fulfil our aims. The game works quite well in its highly limited frameworks - except if we take the target audience's scale of age seriously. The game could be boring and unengaging for the older players. However, we did not find any theoretical background on which iCivics based the success of its program, as well as Argument Wars' success. Therefore, we compared whether it fits the Constructivist Pedagogy model and we concluded that it still has shortcomings (see point B). Finally, we analysed the possibilities of including this game in our Argumentation courses and decided that Argument Wars needs some improvements if we want to use it in Higher Education.

However, future further research is required, which we can summarize in three points. First, we need to analyse the other iCivics games, and the additional materials, for instance the lesson plans, Drafting Board etc. Second, we should try to find the theoretical background of the iCivics Program. Finally, in the future we should suggest some changes that increases the game's applicability for Higher Education purposes, i.e. more debate types. In conclusion, iCivics is a promising subject for thorough researches.

## ACKNOWLEDGEMENTS

Special thanks go to István Danka, Ph.D and all of the colleagues at the Department of Philosophy and History of Science, Budapest University of Technology and Economics, who helped us with their professional advice during our research.

## REFERENCES

- Alexander, B. (2014). *Gaming the Future of Higher Education*. Retrieved November 27, 2014, from <http://www.academiccommons.org/2014/07/24/gaming-the-future-of-higher-education/>.
- Andrews, R. (2010). *Argumentation in Higher Education. Improving Practice Through Theory and Research*. New York: Routledge.
- Argument Wars. iCivics*. (2010). Retrieved May 5, 2015, from <https://www.icivics.org/games/argument-wars>.
- Biggs, J., & Tang C. (2007). *Teaching for Quality Learning at University*. New York: Open University Press.
- Brandenburg, R., & Wilson, J.Z. (2013). *Pedagogies for the Future*. Rotterdam: Sense Publishers.
- Buck, T. E. (2013). *The Awesome Power of Gaming in Higher Education*. Retrieved November 27, 2014, from <http://www.edtechmagazine.com/higher/article/2013/10/awesome-power-gaming-higher-education>.
- DeHaven, D., & Ferebee S. (2012). *Why Gaming Is Working in Higher Ed. Techonomy*. Retrieved November 27, 2014, from <http://techonomy.com/2012/11/why-gaming-is-working-in-higher-ed/>.
- Finkelberg, A. (2014). *iCivics: Assortment of exceptionally well-designed games demystifies government*. Retrieved March 28, 2015, from <https://www.graphite.org/website/icivics>.
- Fry, H., Ketteridge S., & Marshall S. (2008). *Understanding student learning*. In: H. Fry, S. Ketteridge, & S. Marshall (Eds.) (2008). *A Handbook for Teaching and Learning in Higher Education* (pp. 8-26). New York: Routledge.
- Hastings, P., et al. (2009). *Designing a Game for Teaching Argumentation Skills*. In: *AIED 2009: 14th International Conference on Artificial Intelligence in Education*. (2009) Workshop Proceedings, Workshop on Intelligent Educational Games.
- Help Desk. iCivics*. (2009) Retrieved May 3, 2015, from <https://www.icivics.org/help-desk>.
- iCivics, 2015 MacArthur Award Recipient*. 04. 02. 2015. YouTube video. Retrieved from <https://www.youtube.com/watch?t=11&v=DeRtpk1E0Mk>.
- Kárpáti A., et al. (Eds.) (2009). *A 21. század iskolája. (School of the 21<sup>st</sup> century)*. Budapest: Nemzeti Tankönyvkiadó.
- Kirkland, D., & O'Riordan F. (2008). *Games as an Engaging Teaching and Learning Technique: Learning or Playing?* Retrieved November 27, 2014, from [http://icep.ie/wp-content/uploads/2010/01/Kirkland\\_et\\_al.pdf](http://icep.ie/wp-content/uploads/2010/01/Kirkland_et_al.pdf).
- Konstruktív tanuláselmélet, tanulási eredmények mérése. Interjú Nahalka Istvánval. [Constructive Learning Theory, Measuring of the Learning Results. Interview with István Nahalka]* (2014). In: V. Kata (Ed.) (2014). *Alma a fán. A tanulás jövője. 3. kötet. [Apple on the Tree. The Future of Learning. Volume 3.]* (pp. 38-47). Budapest: Tempus Közalapítvány.
- Kozlowsky, A. (2014). *iCivics Social Studies Methods And Technology Blog*. 2014.06.16.<http://socialstudiesmethodsandtechnology.blogspot.hu/2014/06/icivics.html>.
- Laskowski, M., & Badurowicz M. (2014). *Gamification In Higher Education: A Case Study*. In: *Management, Knowledge and Learning International Conference Book*. Portoroz, Slovenia. 971-975. Retrieved May 03, 2015, from <http://www.toknowpress.net/ISBN/978-961-6914-09-3/papers/ML14-663.pdf>.
- Marks, J. (2014). *Can Games Save Higher Education?* Retrieved November 27, 2014, from <http://www.mindingthecampus.com/2014/10/can-games-save-higher-hdducation/>.
- Marquis, J. (2011). *What Does Game-based Learning Offer Higher Education?* Retrieved November 27, 2014, from <http://www.onlineuniversities.com/blog/2011/10/what-does-game-based-learning-offer-higher-education/>.
- Meier, Dave. (2000) *The Accelerated Learning Handbook*. New York: McGraw-Hill.
- Nast, P. „iCivics”. Retrieved March 28, 2015, from <http://www.nea.org/tools/lessons/54384.htm>.
- Our Story. iCivics*. (2009). Retrieved May 03, 2015, from <https://www.icivics.org/our-story>.
- Race, P. (2006). *The Lecturer's Toolkit. A practical guide to assessment, learning and teaching*. New York: Routledge.
- Ruben, B.D. (1999). Simulations, Games, and Experience-Based Learning: The Quest for a New Paradigm for Teaching and Learning. *Simulation Gaming*, 30, 498-505.
- Simulations and Gaming for Experiential Learning*. Retrieved November 27, 2014, from <http://tenntlc.utk.edu/simulations-and-gaming-for-experiential-learning/>.
- Squire, K.D., & Mingfong J. (2007). Mad City Mystery: Developing Scientific Argumentation Skills with a Place-based Augmented Reality Game on Handheld Computers. *Journal of Science Education and Technology*, 16(1), 5-29.

- The Potential of Games and Simulations in Higher Education.* (2013). Next Gen Learning Blog. Retrieved November 27, 2014, from <http://nextgenlearning.org/blog/potential-games-and-simulations-higher-education>. Tomaszewski, J. (2013). *Site Review: iCivics*. Education World. Retrieved March 28, 2015, from [http://www.educationworld.com/a\\_tech/ste-reviews/icivics.shtml](http://www.educationworld.com/a_tech/ste-reviews/icivics.shtml).
- Wingfield, S.S., & Black G.S. (2005). Active Versus Passive Course Designs: The Impact on Student Outcomes. *Journal of Education for Business*. 81(2), 119-123.
- Wormeli, R. (2012) „iCivics” Educational Leadership. *College, Careers, Citizenship Pages*. 69(7). 50-54. Retrieved March 28, 2015, from <http://www.ascd.org/publications/educational-leadership/apr12/vol69/num07/iCivics.aspx>.