



THE EFFECT OF “EAT UP” GAME ON ENGLISH TEACHINGⁱ

Cavide Demirciⁱⁱⁱ,
Hilal Hamzaçebiölu²,
Meryem Arslan³

¹Faculty of Education,
Eskisehir Osmangazi University,
Eskisehir, Turkey

<https://orcid.org/0000-0003-4789-4286>

²Institute of Educational Sciences,
Eskisehir Osmangazi University,
Eskişehir, Turkey

<https://orcid.org/0000-0002-0185-9808>

³Institute of Educational Sciences,
Eskisehir Osmangazi University,
Eskişehir, Turkey

<https://orcid.org/0000-0002-0492-5671>

Abstract:

The use of the game in lessons increases the student's interest and participation in the course of the child's life as it is a natural process and for this reason, the game has been used for many years in education. In this study, it is aimed to get the opinions of middle school 6th grade students in order to process the Countable / Uncountable subject with gamification approach. The study was conducted according to the case study which is a dimension of the qualitative research approach. Pre-test/post-test was applied to the students as a data collection tool. In addition, a student opinion questionnaire consisting of 4 open-ended questions was applied to get the students' opinions about the game. As a result of the research, it was seen that a course with “Eat Up” game had a very positive effect on the students and the students' readiness and motivation were high during all activities. In addition, it was found out from the pre-test and post-test results of the students that “Eat Up” game showed a positive increase both in student achievement and students' perspective on English lesson.

Keywords: gamification, students' opinions, learning English, motivation

ⁱ “EAT UP” OYUNUNUN 6. SINIF İNGİLİZCE DERSİ “SAYILABİLENLER/ SAYILAMAYANLAR” KAZANIMININ ÖĞRENİMİNE ETKİSİ

ⁱⁱ Correspondence: email demircicav@gmail.com, hllhmzcbgl@gmail.com, meryemeren2008@gmail.com

Özet:

Oyun ocuđun yařamının dođal bir parasıdır. Oyun deyince ocuk, ocuk deyince oyun akla gelir. Oyunun derslerde kullanılması, ocuđun yařantısının dođal bir süreci olmasından dolayı ğrencinin derse ilgisi ve katılımını arttırmaktadır ve bu sebeple oyun eđitimde de uzun yıllardır kullanılmaktadır. Bu alıřmada Sayılabilenler / Sayılamayanlar konusunun oyunlařtırma yaklařımı ile iřlenmesine ynelik ortaokul 6. sınıf đrenci dūřuncelerinin alınması amalanmıřtır. Arařtırmanın sonucunda "Eat Up" oyunu ile iřlenen bir dersin đrenciler üzerinde son derece olumlu etkileri olduđu, đrencilerin yapılan tm etkinlikler boyunca hazırbulunluřluklarının ve motivasyonlarının yksek olduđu grlmüřtür. Ayrıca đrencilerin ntest ve sontest sonularından da "Eat Up" oyununun hem đrenci bařarisında hem de đrencilerin İngilizce dersine olan bakıř aıllarında olumlu ynde byk artıř gsterdiđi ortaya ıkmıřtır.

Anahtar Kelimeler: oyunlařtırma, đrenci grřleri, İngilizce đrenme, motivasyon

1. Introduction

The game is a natural part of the child's life. The game comes to mind when you say children. Because play is as important as the basic physiological needs of children in terms of their development and is one of the basic needs of the child (Savař, 2014). *"Play is an indispensable activity that has an important place in the life of children, people and even all living things, is used at different ages for different purposes and has important contributions to learning and development"* (Malta, 2010). A game is a system in which the player is involved, and the game has a certain environment and rule (Järvinen, 2008). A person has learned to communicate, take responsibility, follow the rules, coexistence, share, solve problems, gain and lose from games he plays in all stages from infancy to childhood, from childhood to adolescence, from adolescence to adulthood. Bavelier likens learning with games to "Chocolate Broccoli". He emphasizes that there should be something in chocolate flavor that also contains broccoli vitamins and creates the desired effect. *"Game is so nutritious like broccoli but delicious like chocolate"* (Bavelier, 2012). In this way, hidden learning behind the game can be carried out. Game-based learning approach enables students to learn with fun and to make their gains permanent. Especially in order to keep the interest and motivation of the children of primary school age alive at all times, gamification approach is used. *"Games meet the basic needs of learning by providing us with pleasure, passionate participation, structure, motivation, ego satisfaction, adrenaline, creativity, social interaction and emotion"* (Prensky, 2001).

In order to obtain efficient and positive results in teaching and learning from teaching activities, teaching should be designed and formed accordingly to obtain the highest efficiency from the student (Say, 2016). The highest level of interest, desire and motivation of the student is a prerequisite for an efficient course. The use of the game in lessons increases the student's interest and participation in the course of the child's life as it is a natural process and therefore the game is used in education for many years. In

order to increase the motivation and use of the language with the active participation of the student, game is preferred in English classes. Play is a natural way for children to understand the world around them, so it must be part of their learning, including learning foreign languages (Klimova, 2015). While playing the game, the student's interest is in the message given, not the language, so that the students pay full attention to the game, so that the students learn the language without realizing it (Sarıçoban and Metin, 2000). Phillips (2001:79), "*Games in foreign language teaching enable students to learn English in an enjoyable and rewarding way. Playing games in the classroom improves the ability to collaborate, compete without being aggressive and be a good loser.*" Younger students discover answers in games; they love to guess, so they eagerly use what is taught (Çakır, 2004).

The game that makes learning fun increases students' motivation and creates a positive learning environment for the student in the classroom. It is one of the aims of the Ministry of National Education's English curriculum to ensure that students engage in listening and speaking activities in real life, like people in countries that speak that language (MEB, 2019). Students should understand and use the language first. It is important for the child to listen to the rules correctly in order to understand the language in order to play the game. The student uses English during the game as he will be in contact with his team mates or opponents in the game. The game, which has an important place in the child's life, makes English lessons more fun and meaningful. In this study, it is aimed to get the thoughts of 6th grade students in order to process the Countable / Uncountable subject with the gamification approach. Accordingly, the following questions were sought. What are the thoughts of the students towards the game? What are the views of teachers about play and student behavior? What are the students' views on the positive aspects of learning with games?

2. Methodology of Research

In this study, case study which is a dimension of qualitative research approach is used. "*Case study is a research pattern used in cases where a situation or a case is not clearly defined in its own field of life, where the boundaries between the case and the life frame are not clearly defined and there are many evidence or data sources*" (Yıldırım & Şimşek, 2016, s. 289). In this study, the opinions of middle school 6th grade students were taken to deal with the subject of Countable / Uncountable with a gamification approach. The study was carried out with a total of 25 students (12 girls, 13 boys) studying at Konya-Selçuklu Erenköy Zeki Altındağ Secondary School in 2019-2020 academic year. Students participated in the study voluntarily. In the study, expressions (S1, S2, S3,... S25) were used instead of the students' names. In order to learn the effect of "Eat Up" game on the teaching English, a pretest and posttest of words to be used in the game were applied to the students. The pretest consisted of food, drinks and picture-word matching questions to measure students' prior knowledge of countable-uncountable names. The same pretest was used as posttest after the application. After the game, four open-ended questions were asked to get the students' thoughts about the game.

- 1) Did you like "Eat Up" game? Explain the reasons.
- 2) Did the course of play change your learning? Please explain.
- 3) How did you feel during the course of the game? Please explain.
- 4) Would you like the next lessons to be taught by playin game? Why?

The teacher was also asked about their thoughts about the game and the attitudes of the students after the game.

2.1 Required Materials

Cardboard boxes, crayons, colored cartons, glue, scissors, food and drink images, laminating tool, timer.



Figure 1: Pre-game character design work



Figure 2: Pre-game board arrangement

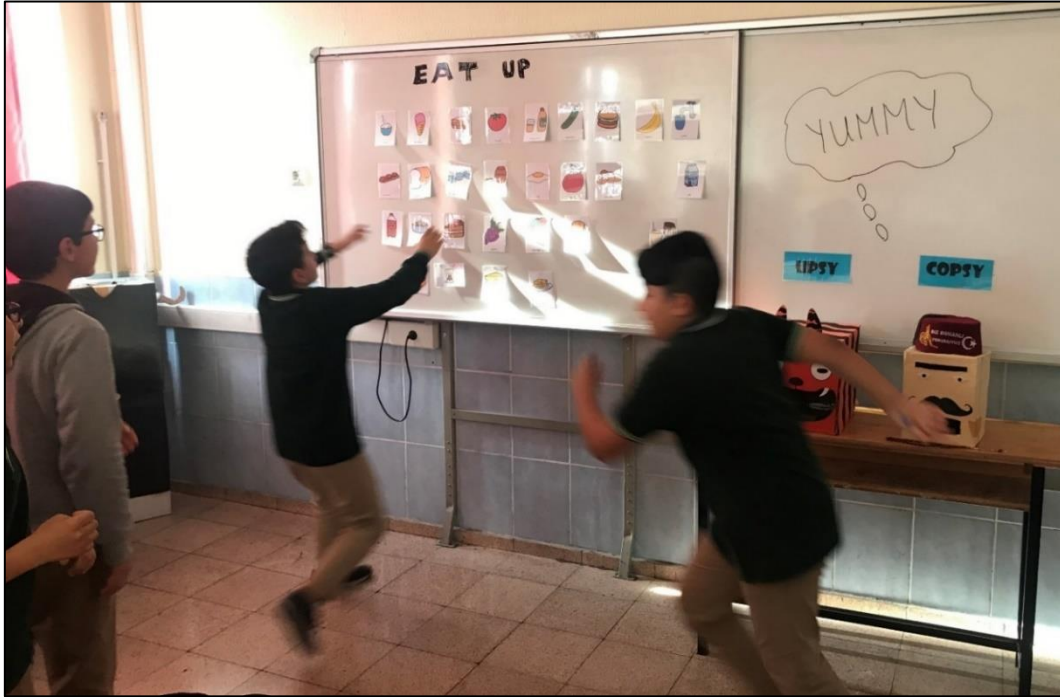


Figure 3: Warriors Group game playing process



Figure 4: Legends Group game playing process

3. Results of Research

3.1 Pre-test and Post-test Results

The results of the evaluation tests before and after the game are as follows.

Table 1: Pre-test and Post-test results

Descriptive Statistics					
	n	Minimum	Maximum	Mean	Std. Deviation
Pre-test	25	35	90	65,80	17,893
Post-test	25	65	100	85,40	11,449

As shown in Table 1, there is a significant difference between the pre-test and the post-test. According to the pre-test results, the average grade achievement score was 65,80, whereas the average post-test results after the game was 85,40. This shows that "Eat Up" greatly increases students' achievement level.

3.2 Students' Attitudes Towards Game

At the end of the game, students were asked to answer four open-ended questions. These questions are as follows;

- 1) Did you like "Eat Up" game? Explain the reasons.
- 2) Did the course of play change your learning? Please explain.
- 3) How did you feel during the course of the game? Please explain.
- 4) Would you like the next lessons to be taught by playing game? Why?

Table 2: Results from Open-ended Questions

Question 1: Did you like "Eat Up" game? Explain the reasons.					
			f	%	
I liked it. Because it was fun.	S1, S3, S6, S10, S12, S14,S17, S18, S19, S22, S23		11	34,37	
Because it was a nice game.	S6, S9, S10, S19, S22, S23		6	18,75	
Because it was excited.	S1, S6, S7, S23		4	12,50	
It was an enjoyable game.	S8, S15, S18		3	9,37	
I learned new words	S13, S16, S21		3	9,37	
It gave happiness.	S7, S8		2	6,25	
We prepared the characters in the game ourselves.	S2, S5		2	6,25	
I love playing games.	S2		1	3,12	
Total			32	100	

At the end of the game, the students asked the question "Did you like the Eat Up game"? and all students answered, "I like it". For "Please explain the reasons" statement 11 students answered, "Because it was fun". The students expressed their opinion in this way for example "S1: Yes, I like. Because I had so much fun and was so excited. We wanted to win, but we didn't, but I had fun. I wish there were always such events.". 6 students said, "It was a nice game" (S22: Yes, I like it because it was a nice game. I had a lot of fun feeding the characters.). 4 students said, "It was excited" (S6: Yes. Because it was so beautiful, fun and exciting. I understood the subject better.). 3 students said, "It was an enjoyable game." (S15: Yeah, I like it. Because it was a very enjoyable and informative game.). 3 students said, "I learned new words." (S16: Yes. Because I learned new words and it was a good lesson because I learned the game.). 2 students answered, "It was cheerful." (S8: Yeah, I like it. I enjoyed playing and I was happy.). 2 students said,

"We prepared the characters in the game ourselves." (S5: Yes, I liked the game because we prepared the characters ourselves.). 1 student said, "I love playing games." (Yes. Because I love to play games, I love the game because we designed the characters ourselves. I want to play again later.).

Table 3: Results from Open-ended Questions

Question 2: Did the course of play change your learning? Please explain.		
		<i>f</i> %
I understood the subject better.	S3,S4, S6, S8, S9, S12, S13, S16, S18,S19, S24	11 42,30
What I learned was more permanent.	S1, S2, S9, S13, S14, S17, S20	7 26,92
I learned the words I mixed.	S10, S15	2 7,69
I learned new words.	S7, S21	2 7,69
I learned faster.	S3	1 3,84
I listened to course more carefully.	S5	1 3,84
It made me overcome my excitement	S3	1 3,84
I attended the course more willingly.	S17	1 3,84
Total		26 100

When Table 3 is examined, the question "Did the course of play lead to a change in your learning?" all of the students answered "Yes, provided." and explained as follows; 11 of the students used the phrase "I understood the subject better."(S12: Yes, I didn't know that rice and bread were uncountable names before I played the game. That way I learned better.). 7 students said, "What I learned was more permanent." (S9: Yes, it made me learn better and be permanent.). 2 students said, "I learned the words I mixed.". (S10: Yes, it did. Because I was confusing countable and uncountable names, but thanks to this game I don't.). 2 students said, "I learned new words." (S7: Yes, he did. I learned countable & uncountable words and new words in English.). 1 student replied, "I learned faster." (S3: Yes, he did. I learned faster and made me overcome my excitement.). 1 student answered, "I listened to course more carefully." (S5: Yes, it is provided. For example, some of my friends do not listen to the course while we are explaining the normal course, but we listen more carefully when done with activity.). 1 student said, "It made me overcome my excitement." (S3: Yes, it did. I learned more quickly and it helped me to overcome my excitement.). 1 student answered, " I attended the course more willingly." (S17: Sure, it did. We were more eager to attend this course because everyone had so much fun.).

Table 4: Results from Open-ended Questions

Question 3: How did you feel during the course of the game? Please explain.		
		<i>f</i> %
I was very happy.	S2, S3, S7, S8, S9, S10, S11, S15, S16, S17, S18, S19, S24	13 34,21
I was excited.	S2, S3, S5, S6, S7, S12, S13, S14,	8 21,05
I felt better.	S4, S8, S20, S21, S22, S24	6 15,78
I had fun.	S9, S10, S12, S17, S21	5 13,15
I wondered who would win.	S6, S13, S14	3 7,89
I was never bored in the lesson.	S3, S15	2 5,26
I felt anxious.	S7	1 2,63
Total		38 100

As can be seen in Table 4, the question "How did you feel when you were studying with the game?"; 13 students answered, "I was very happy." (S3: I was very happy while playing and felt excited. Sometimes I had bored before, but I never got bored in this lesson.). 8 students said, "I was excited." (S2: I was very excited but I was very happy when our team won the game.). 6 students said, "I felt better." (S4: I felt better. Thanks to the course I understood better.). 5 students said, "I had fun" (S17: I felt very happy and had fun with my friends.). 3 students said, "I wondered who would win." (S13: I felt excited. I was wondering which team would win.). 2 students said, "I was never bored in the lesson." (S15: I felt very happy, sometimes I had bored in class before but I was never bored and learned very well.). 1 student said, "I felt anxious." (I was happy, excited and a bit anxious. Because we had a chance of losing the game.). When we examined the answers in detail, it was seen that the students experienced many positive emotions at the same time during the game and only a few students were worried about not being able to win.

Table 5: Results from Open-ended Questions

Question 4: Would you like the next lessons to be taught by playing game? Why?			
		<i>f</i>	<i>%</i>
I would because I had so much fun.	S1, S4, S7, S8, S9, S10, S11, S13, S17, S22	10	35,71
I would. I understood the subject better.	S3, S4, S6, S8, S9, S16, S18, S24	8	28,57
I would. What I learned was more permanent	S6, S14, S15, S17, S21	5	17,85
I would. The lesson was more exciting.	S16, S17	2	7,14
I would because I love playing games.	S21	1	3,57
I would because I never felt bored in that lesson.	S23	1	3,57
I would. We had good memories with my friends.	S1	1	3,57
Total		28	100

When we look at Table 5, it was seen that all of the students answered, "I would" to the question "Would you like the next lessons to be taught by playing game?" When asked why, it was seen that 10 students answered, "Because I had so much fun." (S1: Yes. I would love to. I've had so much fun that I've never had so much fun in a lesson. I wish lessons were always like this, I had a lot of good memories with my friends.). 8 students answered "I would. I understood the subject better." (S4: Yes, I would like all lessons to be taught through games because I understood the subject better and have more fun.). 5 students said, "I would. What I learned was more permanent." (S17: Yes, I would like to, because we both have fun and learn so that subject becomes more memorable.). 2 students said "I would. The lesson was more exciting." (S16: Yes, I would love to. The lessons are more enjoyable and I learn better.). 1 student said, "I would because I love playing games." (S21: Yes, I would, because I love to play games and the subject is better in my mind through games.). 1 student answered, "I would because I never felt bored in that lesson." (Yeah, I do, because I'm never bored.). 1 student said "I would. We had good memories with my friends." (Yes. I had so much fun that I had never had so much fun in any class. I wish the lessons were always like this because we had good memories with my friends.). When the four open-ended questions asked at the end of the game were

evaluated in general, it was observed that the course carried out using the gamification approach had markedly positive results in terms of both academic achievement and motivation and attitudes towards the course.

3.3. Teacher Opinions about Game and Student Attitudes

I observed that all students were very enthusiastic, happy and excited during the two class hours planned for character design. In addition, the fact that they brought all the materials required for character design in full was an indication of their high readiness. In this activity, which we divided the class into two groups, students experienced the importance of teamwork and the happiness of accomplishing a job together, which increased the interest and motivation of the students to the lesson and the subject. At the end of the two lesson hours allocated for character design, all students were proud and happy to be able to fulfill the assigned task. I also observed that the topic was more memorable because they found the names they prepared together.

All students were in communication and interaction with each other constantly as they worked and competed in groups. In the first part of the game, in which they classified the cards as countable / uncountable, I observed that both team members grouped each other by helping, discussing and sharing information, and even explaining why they were countable or uncountable. In this way, I have also observed how effective peer teaching is. In the second part of the game, which the characters were fed with these foods and beverages, as the students competed as a group, all students actively participated in the course. Since the groups went on the board and played the game, the other group students watched the game curiously.

The aim of the game was to feed the characters with food and drink images that can be countable and uncountable as soon as possible and in the most accurate way. Therefore, students were constantly active and excited throughout the course. At the end of the game, all the students in the winning and losing group were very happy and said they wanted to play the game again. Sometimes there was a lot of noise during the game, but this was an indication of the students' interest and willingness to win.

As a result, I have observed that a course with a gamification approach has a very positive effect on the students and that students have high readiness and motivation during all activities. I also found that the subject taught by this approach was more memorable and that even the students who were less interested in the course had a clear perception. From the results of the pre-test and post-test that I applied before and after the game, and the student attitudes at the end of the game, I observed "Eat Up" game showed a positive increase both in student achievement and in the perspectives of the English course.

4. Discussion and Conclusions

According to the results of the study, it was seen that the course was enjoyed by the students with "Eat Up" game, it was effective in understanding the subject better, the students were happy and excited during the game and they had fun. It was determined

that gamification approach is important in terms of increasing interest of students towards the lesson and developing positive attitude towards participation in the lesson. In addition to this, it has emerged from student opinions that "Eat Up "creates a competitive environment and this increases the motivation of the students. In his study, Polat (2014) found that students exhibited a positive attitude towards gamification.

We can say that "Eat Up "affects students' competence, problem solving, group working skills development. "Gamification enabled students to interact with each other and share their mutual ideas, while problem solving, critical thinking and cooperative working skills were positively affected." (Cózar-Gutierrez ve Sáez-López, 2016; Pesare ve diğ., 2016). According to Pesare, Roselli, Corriero and Nossano (2016), it was concluded that the continuity of the performances of the students was ensured for a longer time when they worked in groups during play with learning.

It is seen that the adaptation of the play, which is a natural part of the child's life and which has a big place in life, to the students, creates a positive and fun lesson environment by motivating the lesson, thus making learning natural and permanent. Based on the students' opinions about "Eat Up" game, it was concluded that the teaching of the game was liked by the students and had an effect on the learning increase.

Conflicting of Interests Statement

The authors declare that there is no conflict of interest.

About the Authors

Cavide Demirci is a Professor at Osmangazi Univesity of Faculty of Education, Turkey. Please visit <https://akademik.yok.gov.tr/AkademikArama/view/viewAuthor.jsp> for more information.

Hilal Hamzaçebiöglu is an English teacher at Ministry of Education in Turkey. She is also currently a MA student at Eskişehir Osmangazi University, Turkey.

Meryem Arslan is an English teacher at Ministry of Education in Turkey. She is also currently a MA student at Eskişehir Osmangazi University, Turkey.

References

- Cózar-Gutiérrez, R., & Sáez-López, J. M. (2016). Game-based learning and gamification in initial teacher training in the social sciences: an experiment with MinecraftEdu. *International Journal of Educational Technology in Higher Education*, 13(1), 2.
- Çakır, İ. (2004). İngilizcenin yabancı dil olarak öğretildiği sınıflarda çocuklara yönelik etkinlikler geliştirmek. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi*; 24(3),101-112.
- Daphne Bavelier – TED Speaking (2012). Retrieved February 22, 2019 from <https://www.youtube.com/watch?v=FktsFcooIG8>.
- Järvinen, A. (2008). Games Without Frontiers: Theories and Methods for Game Studies and Design. Doctoral Dissertation. Tampere: University of Tampere. Retrieved

- February 19, 2020 from <https://trepo.tuni.fi/bitstream/handle/10024/67820/978-951-44-7252-7.pdf>.
- Klimova, B. F. (2015). Games in the teaching of English. *Procedia-Social and Behavioral Sciences*, 191, 1157-1160.
- Malta, S. (2010). İlköđretimde kullanılan eđitsel bilgisayar oyunlarının öđrencilerin akademik başarılarına etkisi. *Unpublished master's thesis, Sakarya Üniversitesi*.
- MEB. (2019). İngilizce dersi öđretim program. Retrieved from <http://mufredat.meb.gov.tr/Dosyalar/>
- Pesare, E., Roselli, T., Corriero, N., & Rossano, V. (2016). Game-based learning and gamification to promote engagement and motivation in medical learning contexts. *Smart Learning Environments*, 3(1), 5.
- Phillips, S. (2001). *Young Learners*. Hong Kong. Oxford University Press.
- Polat, Y. (2014). Bir vaka incelemesi: Oyunlaştırma yöntemi ve İngilizce öđrencilerinin motivasyonu üzerine etkisi (Yüksek Lisans Tezi). Çađ Üniversitesi Sosyal Bilimler Enstitüsü, Mersin
- Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the horizon*, 9(5), 1-6.
- Savaş, E., & Gülüm, K. (2014). Geleneksel oyunlarla öđretim yöntemi uygulamasının başarı ve kalıcılık üzerine etkisi. *Trakya Üniversitesi Sosyal Bilimler Dergisi*, 16(1), 175-194.
- Sarıçoban, A., & Metin, E. (2000). Songs, verse and games for teaching grammar. *The Internet TESL Journal*, 6(10), 1-7.
- Say, S. F. (2016). Yedinci sınıf fen bilimleri dersine yönelik tasarlanan bilgisayar oyununun öđrencilerin fene yönelik özyeterliklerine, motivasyonlarına ve saldırganlıklarına etkisi, Doktora Tezi, Pamukkale Üniversitesi, Eğitim Bilimleri Enstitüsü, İlköđretim Anabilim Dalı, Denizli
- Yıldırım, A., & Şimşek, H. (2013). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*, Seçkin Yayıncılık, Ankara.

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).