



5th World Conference on Learning, Teaching and Educational Leadership, WCLTA 2014

Theoretical View to The Approach of The Edutainment

Nalan Aksakal^{a*}

^a*Anadolu University, Sports Science Faculty, Eskişehir 26555, Turkey*

Abstract

The purpose of this study is to present the importance of the edutainment approach. In recent years the concept of entertainment and experience has being discussed in education field like being discussed in other fields. It is pointed that subjects containing entertainment attract consumers' attention more and events making the consumers experience are more permanent and recollective. One of the fields that entertainment is densely active is education. Being an inevitable entertainment of learning with the alteration in education field is based to an obsessive claim and in accordance with that a concept emerges. Edutainment is a word that states a mix of entertainment and education or marriage of education and entertainment. The main aim of this mixture is to support education with entertainment. Edutainment is defined as an application compounded with educational aims and measurements and providing learners with regarding the value of life, using resource and methods and having a good time with the way of creating and having experience.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of Academic World Education and Research Center

Keywords: Education, Edutainment, Edutainment Approaches

1. Introduction

Edutainment is a derived word that states a mixture of entertainment and education or marriage of education with entertainment. (Colace, et. al., 2006) The main purpose of this application is to support education with entertainment. Edutainment has been used as a classical formula in producing educational computer games which are based on learning theories since 1970s. The first person who first suggests the idea of edutainment is Robert Heyman from American National Geography Academic Union. Robert Heyman named the film of game type education as 'Education by Entertaining'. David Buckingham who is an expert of mass education in England indicated that the concept of edutainment which needs visual material is a style of teaching type mixed with game or mixed with 'the game of describing with least word'.

* Nalan Aksakal. Tel.: +0-90 222 3350580; fax: +0-90 222 3213564.

E-mail address: naalan@gmail.com

The different descriptions of edutainment were made by many researchers. Analyzing these definitions is useful.

- Edutainment is defined as to encourage entertaining learning with the way of interaction and communication, exploring by creating learning awareness, trial and error (Shulman and Bowen 2001).
- Edutainment is stated as a place comprised with mixture of many items (such as sound, animation, video, writing and picture) and a place where learners both have fun and learn (Druin and Solomon, 1996).
- Edutainment is described as a type of entertaining which is designed with the aim of educate by including entertaining variety such as multimedia software, internet sites, music, films, video and computer games and TV programs in order to exhilarate in addition to educate (Colace and co, 2006).
- Edutainment is named as a hybrid type which is based on visualizing and animation made with the formats like game, diegetic things and visual materials (Buckingham and Scanlon, 2001).
- Edutainment is to execute permanence of learning by attracting learners' attractions and regenerating their feelings (Okan, 2003).
- Edutainment is also explained as using methods and orders that attract learners' attention in order to provide learners' individual development in learning environments (Fossard, 2008).
- Edutainment is also defined as to provide experiencing and having a good time to the learners with the way of creating and to provide using resources and methods, regarding the meaning of life to learners, as a theory and an application which are combined with educational aims and measurements (Wang and co, 2007).
- Edutainment is applied in order to teach learners how they should use their own knowledge, analyzing things that they learn, combining things that they perceive or evaluating things that they learn (Charsky, 2010).

With the help of these definitions, the common qualities of the Edutainment definitions can be listed as below:

- Entertainment and interaction which is thought missing in education, attracting learners' attention because of being in nature of game.
- Combining education and entertainment and increasing learners' excitement and enthusiasm to teach them subject and information that is hard to learn.
- Occurring learning more easily by making subjects and information that will be taught more enjoyable.
- Attracting learners' attention and supplying permanence of learning by rousing of learners' feelings.
- Making internalizing the difficult subjects easy with the methods of simulation or graph and visual methods like in real life.
- Teaching how to use resources and methods, regarding the value of life by combining educational aims and measurements.
- Teaching how the individuals in learning environments apply their own knowledge.
- Supplying that individuals understand or internalize what they learn.
- Being used in order to teach combining what they perceive or evaluating what they learn to learners.
- Finally, it provides learners' having a good time with the way of creating and experiencing.

2. Edutainment Approaches

If the aim is to teach new things to the next generation and to provide permanence of the teaching, teaching methods should be ordered in the direction of their needs and wishes. The main purpose of Edutainment is to attract student's attention and to make him focus on events and teaching materials during learning (Okan, 2003).

2.1 Taking a Role and Interaction

In theory, consumption is indicated as an experience deriving from interaction of subject (consumer or student) and object (product, an event, an idea, a person, a lesson etc.) in given context. They have examined a few studies about effective experiences and by determining the consumers' reactions to this type of experiences the evaluated their point of view from taking a role in interaction to teaching by entertaining widely. Like in games, in education sector students are assumed as consumers and it is thought that participation can be increased by including entertainment to students' course content and materials. Clarke who supports this idea emphasized that if students include learning theory and have a central role concordantly, they can be successful. The other researcher Wooldridge who has the same idea states that lessons which are made enjoyable with empiric learning theory combined with learning aims can convert into useful activities. According to Solomon, there are two important factors of every lesson in terms of student satisfaction: students and evaluating them in point of lessons. Based on traditional marketing model, every lesson is a service and every service need to meet its service provider. In this situation, service provider is an educator. Consumer/students evaluate a lesson to the extent of the experience which they obtain with service provider/educator and impression (Argan and Sever, 2010).

The effort of including students in class activities of educator affects the result of learning. With the view of this, the result of learning is directly associated to supportive type class behaviors like participation. Even a student takes a part in others' learning experiences (Curran and Rosen, 2006). Dallimore and co.(2006), class debates or having a role in class is named as active learning which is done to make students tied to class. Nunn (1996), mentioned about being valuable of taking role in a university level class because of presence of a positive relationship between active learning and taking part (Argan and Sever, 2010).

Appleton – Knapp and Krentler (2006), indicated that having a role in class activities and being in an interaction with educator and classmates of a student affect the student's satisfaction level. A research which supports this finding belongs to Curran and Rosen (2006). At the end of their researches, they emphasized that students use seven factors to evaluate the lesson. They remarked the importance of interaction in learning and teaching, character of educator, type of teaching, learning environment, pair factor (Argan and Sever, 2010).

2.2 Drama (Dramatization)

To Pearce (2006), educational drama can be also defined as performing. In the method of performing, an event, situation or a problem is dramatized by a group of students in front of the other students' eyes. After students watch the dramatization, they discuss the event at all points. The method of performing has a effective role in gain emotion and skills. For example, during the play by the way of place themselves in someone's shoes, students try to reflect their feelings and thoughts. While they are carrying out this, they learn the art of performing. As for drama is defined as a teaching technique providing students with learning by experience in which situation how they behave. It improves students' problem solving and communicating ability and dramatization technique comprises two types: formal drama and natural drama (Demirel, 1998).

Creative drama in education resembles performing method quietly. In this drama type, roles are shared by teachers. However, in creative drama students determine how to perform the roles (Demirel, 1998). From the point of education sciences, drama was built around empiric learning theory. In terms of empiric learning theory, the experiences of learners are main variances leading teaching – learning process. Students obtain these experiences either from past and present living out of teaching process or from the activities that they attended under the guidance of their teachers during teaching. Empiric learning theory is defined analyzing individuals' actions by thinking, evaluating them and restructuring them in consideration of individuals' former experiences in order to make sense of their new experiences (Andersen and co. 2000).

Empiric learning theory defines learning as the process of creating knowledge with the result of experiences. Knowledge is comprised as a result of perceiving information and processing it.

Empiric learning theory bases on two concepts which have a logical relation between them; perceiving experiences and processing experiences. Perceiving experiences occurs through concrete living and abstract conceptualizing, processing experiences, active living and reflective observation (Kolb, 1984). Thus education is explained as a process consisted by four phases and the general features of these phases can be ordered as the

following (Kuri, 2000).

1. Individuals who perceive the experiences by the way of concrete living and sense contact with the new knowledge and try to integrate this new knowledge into their own feelings and value. In problem solving, they rely on their own senses rather systematic approaches (Kuri, 2000).
2. For individuals who perceive the experiences by the way of abstract conceptualizing or thinking, logic and systematicity are more important than senses. They can organize the knowledge in concepts, principles and theories. They find that global definitions and general principles are more valid than their thoughts. They are quietly successful at topics such as logical analyzing of ideas, systematic planning, perceiving the knowledge (Kuri, 2000).
3. Individuals who process their experiences by the way of reflective observation and watching question different points of view and ideas. They prefer being patient, objective and careful in their decisions. While forming an idea, they rely on their own senses and thoughts. Learning bases on thinking and careful observation (Kuri, 2000).
4. Individuals who process their experiences by the way of active living and pretending prefer applying to proper materials in order to solve a problem of real life or learn new things. To test an idea, it provides the conditions which are necessary. They have the ability of making something, taking risk and acting. They tend to obtain necessary things rather than absolute truth (Kuri 2000).

Individuals in the process of learning sometimes use concrete living and sometimes use abstract conceptualizing while they perceive their experiences. While they process the experiences, they sometimes use active living and sometimes use reflective observation. Learning styles which cause differences in learning occur with the help of the combination of these four phases which create empiric leaning theory. From the combination of concrete living and reflective observation, qualifier learning styles are created. Internalizing type of leaning styles appear from the combination of reflective observation and abstract conceptualizing. Separating types are formed from the combination of abstract conceptualizing and active living. With the combination of active living and concrete living, establishing learning styles are created (Kuri, 2000).

Empiric learning theory is used in many fields of higher education. It can be provided achieving the target purpose with entertainment by drawing the students in learning process with the help of acting and drama methods (Brennan, 2008). Games can be formed like ask and answer of imitation and competition. Games have positive effects on learning but this positive effect can only exist with educator and classroom atmosphere (Argan and Sever, 2010).

2.3 Story (Simulation)

Teaching materials have positive effects on the result of learning. Teaching materials prepared with the way of creativity can increase student participation. Despite of abundance of studies about learning environment and its possible effects on learning, studies about teaching materials are really a few (Argan and Sever, 2010). With this method of teaching, students can include into active debates and even they can link themselves with the real life events used in class with the method of simulation and narration. Simulation method is defined as a technique which provides dealing an event like a real one and studying on it to students. In other ways, it is also stated as a teaching approach practiced on a sample (model) and developed realistically to support learning (Küçükahmet, 2005).

2.4 Educator and Classroom Atmosphere

One of the factors that affect students' success is educator's lesson and his taking students view into account about the topics related to his lesson and his dealing with the view and caring them. This is seen as an important principle in terms of providing feedback in teaching learning processes. Educator's encouraging students to participate actively into activities in classroom and having a calm atmosphere in classroom affect students' success positively. Students' knowing the classroom rules in advance, educator's caring about them and being tolerant affect students success to a certain degree (Özbay and Şahin, 2000). Educators take an important role in giving lessons at university and they help students with grasping and perceiving the subject. The large part of the students focuses on

multidimensional nature of evaluating of students who are in the experience of class and especially on educators. Educator is an important factor on the success and failure of the lecture. Moreover, other factors which can be effective in students' evaluating educator and lesson should also be understood (Argan and Sever, 2010).

In contemporary education approach, student centered education that is learning is emphasized. Instead of traditional learning defined as permanent alteration of behavior, it is dominated to think that learning is a productive process. Students' learning is also affected by teacher's equipment and learning styles and even the atmosphere of the classroom. Therefore, in order to form the learning atmosphere, educator needs to create positive classroom atmosphere priorly. Classroom atmosphere is related to physical and physiological environment of the class and it has a direct effect on students' behavior and success (Kocabaş and Uysal, 2006).

2.5 Edutainment in Computer Environment

Edutainment in computer environment is accepted as a sub group of computer games noticed easily with the obvious award structure. And it is apart from educational experience in games (Egenfeldt – Nielsen, 2007). According to Buckingham and Scanlon (2001), edutainment in computer environment is defined as a mixed type based on formats like games, stories and visual materials. The purpose of Edutainment in computer environment is to attract learners' attraction and to retain their attraction by tying their feelings to computer monitors thanks to animation colored vividly. This includes an interactive education type. Mc Kenzie (2000), used a term called 'technological entertaining' which means that technology has tight ties with entertaining but has some deficiencies in strictness and value. Technological entertaining is explained as using technology for just using it without developing reading, writing, questioning skills learners.

Educators considered computer games of a tool which will improve learning after commercial successes in 1980s and 1990s and ordered the reasons of using computer games in education and training as follow (Tüzün, 2006);

- Teaching methods go towards learner centered teaching styles which emphasize learner role more actively than teaching methods.
- Computer games can be used as effective tools in teaching complex subjects.
- Computer games increase the motivation of learners.

Technical developments provide using computers in education environments as for visual and audial materials like animation, simulation and interpretation (Kara 2009). However, it is observed that Edutainment in computer environment go slowly into a narrower frame from a conservative approach. In this respect, education and training in Edutainment in computer environment is seen as a villain and it is criticized for supporting learning structure which is problematic for new generation. Students should bear problematic and annoying conditions which students come across in learning process. Nevertheless, it is claimed that this situation is not come across in Edutainment much. Because of these reasons, negative approach is occurred for Edutainment in computer environment (Buckingham and Scanlon, 2001; Egenfeldt and Nielsen, 2007).

2.6 Edutainment with TV Programs

Edutainment with TV programs is carried out with TV programs discovered and enhanced by 'Games Companies' which teach by entertaining TV program is managed by 'TV Station' and 'TV Robot'. For instance; 'The Discovery Channel' and 'The National Geographic Channel' in America have a big market share among TV programs produced with content of education all over the world. Furthermore, an agreement has been signed among Learning Channel, History Channel and Southpark Interactive in order to educate by entertaining (Wang and his co. 2007). Edutainment with TV programs is not only about education topics on school level but is also contains teaching target audience some kind of knowledge via film and TV series. For example, it is expressed that O' Sullivan and Desperate Housewives were used as a financial education tool (Argan and his co. 2009). Argan and his co. (2009), determined that for students, memorability increases with the help of the film which is about the subject in the focus group research made in order to decide feelings, thoughts and attitudes towards Edutainment of students who take marketing lesson.

2.7 Edutainment with Robots

Last ten years, robots which get dense attraction because of very fast development in information and technology became indispensable part of education activities (Birk, 2008). Yorita and co. (2009), search the role of robots used in various education fields because of preferring distance education. It is identified that students listen to robots used in distance education curiously and with pleasure. Birk and his co. (2008), did a research in 'Novelty Camp' which is a busy study environment encouraging secondary school students engineering and science via humanoid robots. Secondary school students were educated with various humanoid robots for scientific education. In robotics camp which includes the duties of design, structure and programming, different educational activities were used. In this research, two quietly different platforms were used; the first one of is LEGO used commonly for educational activities, the second one is Bioloid humanoid robots used commonly for professional research. Although the secondary school students who participated to the research were inexperienced about robotics, it was found that they prefer Bioloid humanoid robots instead of LEGO robots which are used commonly for educational activities. This is because students finding out mechanic programs, information about electronics on their own with Bioloid humanoid robots by entertaining supplied learning permanence and will of repeating experiences at home.

3. Method

In this study, a general assessment is made of edutainment approach. As a research tool to researchers of the survey method was used.

4. Discussion and Conclusions

When learners' needs are taken into account, teaching methods which will be chosen in the direction of qualities which is wanted to improve in learners, cost of education and training, physical conditions of teaching environment, experience and the level of knowledge which is had, attitudes about teaching methods have importance in reaching the aims which are wanted to be used. It can be supplied that teaching is occurred more easily by making information and subjects which will be taught to contribute to develop knowledge more enjoyable and students try to find an answer about limitations, concepts and information.

Bergman and his co. (2010), in their research, they aimed that making students attend to physical activity and increasing their eating and drinking habits by using vegetable and fruit costumes during 20 minutes with 40 people which were chosen among senior year students of pre-school teaching department. At the end of the presentation, positive feedback was taken and it was stated that students' awareness increasing by evaluating the answers which were given to the questions asked primary school students by their teachers.

In a different research, Biolatta and his friends (2009), focused on cognitive strategies which are adopted by university students who participated in robotics laboratory program with Lego MindStorms team. During laboratory activities, they prepared reports about students' team studies and made analyzes. In education by entertaining, robotics made students who are from different cognitive levels gain new abilities by encouraging.

Dick and Carey (1996), states that one of the most important advantages of the teaching methods which are used to reach the aims is the necessity of students' having features which can practice individual learning conveniently to their own speed. Being different of every student's learning speed causes educators' need different time duration. In order to make individual teaching, educators should use enjoyable educational computer software and they should adjust it according to students' different learning speed. Enjoyable educational computer software which is accepted as insufficient should be structured its supplementary learning living or offering activities features and it should be made suitable for students' different learning speed. Otherwise, it can cause students' negative attitude because of motivating students.

Shiratuddin and Landoni (2002), states that presentation prepared in computer environment in accordance with the target aims which were decided at the beginning of the term give students ideas about the aims that they should reach at the end of the learning. Presenting the aims in advance helps students with understanding the aims during learning process. However, not giving the students all the aims completely prevents students from reaching teaching aims. Special visual slide should be added to the presentation prepared for gym class and some parts which are

useful of sports programs should be added by being inspired by daily events.

Başöz and Özdemir (2002), examined whether there is a significant difference between altitude of the students who are in a gym class which is made with the method of creative drama and altitude of the students who are in a gym class which is made with the other methods. In the result of the research, it is seen that students have difficulty in the lessons which is made with the other methods but students enjoy too much in the lessons which is made with creative drama.

Another study which has the same results was made by Argan and his co (2009). They determined that for students, memorability increases with the help of the film which is about the subject in the focus group research made in order to decide feelings, thoughts and attitudes towards Edutainment of students who take marketing lesson. It should be taken into consideration that remembering the subject which was taught by using entertaining, being understood the subjects and affecting success of exams positively.

Five themes appeared in another study which Argan and his co. made with the aim of determining feelings, thoughts and attitudes of marketing students towards Edutainment (2010). Each of these themes are related to each other and they are: classroom environment, inclusion the student into the environment, methods which can be used in education by entertaining, entertainment and learning seriousness relationship, experiences and its effect on success. At the end of the research it was seen that application of Edutainment can bring about both learning and success as the relation with its effects on learning experiences and lesson success.

Drane and his co. (2011), stated that educator should increase the quality of students' teaching experience primarily. Inasmuch as it is necessary to be creative and create convenient environment to bring about students' learning. Educators should learn some technics which are aimed at developing a positive learning environment and they should provide students with being enthusiastic about learning by creating enjoyable atmosphere in order to make subjects more enjoyable and make learning permanent. While the teaching environment is being arranged, some preparations which attract students' attention should be made. Lesson presentation can be brought about more pleasantly and more easily by material developing with existing materials.

Edutainment approach provides students with having a good time and experiencing the way of creating, using information resources and teaching methods. Students' enthusiasm and excitement can be increased in order to teach them information and subjects which are difficult to learn thanks to Edutainment approach which appeared from combination of education and entertainment. Teaching can be made more easily by attracting learners' attention and making subject and information which will be taught with Edutainment approach more enjoyable. Hence, by teaching permanence is supplied learners' satisfaction and suggestion is affected positively.

References

- Andresen, L., Boud, D. & Cohen, R. (2000). Experience Based Learning, Understanding Adult Education and Training, *Second Edition (4th Ed.)*. Allen & Unwin, Sydney.
- Appleton-Knapp, S.L. & Krentler, K.A. (2006). Measuring Student Expectations and Their Effects on Satisfaction: The Importance of Managing Student Expectations. *Journal of Marketing Education*, 28(3), pp. 254-264.
- Argan M., Sever N. S. & Argan Tokay M. (2009). Edutainment in Marketing Courses: Findings from Focus Group Studies in Turkey, *Business Research Yearbook Global Business Perspectives Volume XVI*, 2009, Number 2, pp. 542-548.
- Argan, M. & Sever, N. S. (2010). Constructs and Relationships of Edutainment Applications in Marketing Classes: How Edutainment Can be Utilized to Act as a Magnet for Choosing a Course?, *Contemporary Educational Technology*, pp. 118-133.
- Başöz, G. & Özdemir, E. (2002). İlköğretimde Yaratıcı Drama Yöntemi ile Yapılan Beden Eğitimi Dersleri ile Diğer Yöntemlerle Yapılan Beden Eğitimi Derslerinde Öğrenci Tutumlarının Karşılaştırılması, *7. Uluslararası Spor Bilimleri Kongresi*, Antalya.
- Bergmann, L., Clifford, D. & Wolff, C. (2010). Edutainment and Teen Modelling May Spark Interest in Nutrition & Physical Activity in Elementary School Audiences, *Journal of Nutrition Education and Behaviour*, 42, pp. 139.
- Bilotta, E., Gabriele, L., Servidio, R. & Tavernise, A. (2009). Edutainment Robotics as Learning Tool, *Edutainment 2009*, p. 422.
- Birk, A., Poppinga, J. & Pffingsthor, M. (2008). Using Different Humanoid Robots for Science Edutainment of Secondary School Pupils, *RoboCup 2008*, pp. 451-462.
- Brennan, R. (2008). Educational Drama: A Tool For Promoting Marketing Learning?, *Middlesex University, and Glenn Pearce, University of Western Sydney*. DOI:10.3794/ijme.81.237.
- Buckingham, D. & Scanlon, M. (2001). Parental Pedagogies: An Analysis of British Edutainment, *Magazines for Young Children Journal of Early Childhood Literacy*, pp.281-299.
- Charsky, D. (2010). From Edutainment to Serious Games: A Change in the Use of Game Characteristics, *Games and Culture*, pp. 177-198.
- Clarke, B. (2008). Case and Experiential Learning Methods. *Marketing Education Review*, 18 (2), pp. 54.
- Colace, F., De Santo, M. & Pietrosanto, A. (2006). Work in Progress: Bayesian Networks for Edutainment, *36th ASEE/IEEE Frontiers in Education Conference*, DOI: 10.1109/FIE.2006.322573.

- Curran, J.M. & Rosen, D.E. (2006). Student Attitudes toward College Courses: An Examination of Influences and Intentions, *Journal of Marketing Education*, 28(2), pp. 135-148.
- Dallimore, E. J., Hertenstein, J.H., & Platt, M.B. (2006). Nonvoluntary Class Participation In Graduate Discussion Courses: Effects On Grading Cold Calling, *Journal of Management Education*, 30(2), pp. 354-377.
- Demirel. Ö. (1998). Genel Öğretim Yöntemleri, *Kardeş Kitap ve Yayınevi*, Ankara, s. 61.
- Dick, W. & Carey, L. (1996). The Systematic Design of Instruction (4th Ed.), NY: *HarperCollins College Publishers*, New York, pp. 58-66.
- Drane D., Kim W., Goldsmith A. & Phillips D. (2011). The Effective Use Of Humour In The Sport Management Classroom, *2011 North American Society for Sport Management Conference (NASSM 2011)* London, June 1 – 4, p. 382.
- Druin, A. & Solomon, C. (1996). Designing Multimedia Environments For Children: Computers, Creativity And Kids, NY: *John Wiley and Sons*.
- Egenfeldt-Nielsen, S. (2007). Third Generation Educational Use of Computer Games, *Journal of Educational Multimedia and Hypermedia*, pp. 263-281.
- Fossard, E.D. (2008). Using Edu-Tainment for Distance Education in Community Work, *Sage Publications*, 2008, pp. 19.
- Kara, Y. (2009). Biyoloji Öğretimi İçin Hazırlanmış Eğlenceli Eğitim Yazılımı Değerlendirmesi, Ondokuz Mayıs Üniversitesi, *Eğitim Fakültesi Dergisi*, s. 17-30.
- Kocabaş, A. & Uysal, G. (2006). İlköğretimde İşbirlikli Öğrenmenin Müzik Öğretiminde Sınıf Atmosferi ve Şarkı Söyleme Becerileri Üzerindeki Etkisi, *Ulusal Müzik Eğitimi Sempozyumu Bildirisi*, Pamukkale Üniv. Eğt. Fak., Denizli.
- Kolb, D. (1984). Experiential Learning, *Englewood Cliffs, NJ. Prentice Hall*, pp. 138-146.
- Küçükahmet, L. (2005). Öğretimde Planlama ve Değerlendirme, *Nobel Yayıncılık*, Ankara, s. 196.
- Kuri, N. P. (2000). Kolb's Learning Cycle: An Alternative Strategy for Engineering Education, *Educational Resources Information Center*, pp. 3-7.
- McKenzie, J. (2000). Beyond Edutainment and Technotainment From Now, On 10, 1.
- Nunn, C. E. (1996). Discussion in the College Classroom, Triangulating Observational and Survey Results. *The Journal of Higher Education*, 67(3), pp. 243-266.
- Okan, Z. (2003). Edutainment: Is Learning At Risk?, *British Journal of Educational Technology*, pp. 255-264.
- Özbay, Y. & Şahin, M. (2000). Empatik Sınıf Atmosferi Tutum Ölçeği (ESATÖ): Geçerlik ve Güvenirlilik Çalışması, *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, Sayı: 19, s. 104-113.
- Pearce, G. (2006). University Student Perceptions of the Difference between Educational Drama and Other Types of Educational Experiences. *Marketing Education Review*, 16(2), pp. 23-35.
- Shiratuiddin, N. & Landoni, M. (2002). Evaluation of Content Activities in Children's Educational Software, *Evaluation and Program Planing*, pp. 175-182.
- Shulman, J. L. & Bowen, W. G. (2000). The Game of Life: College Sports and Educational Values, *Princeton University Press*, New Jersey, pp. 82.
- Solomon, M. R., Surprenant, C.F., Czepiel, J.A., & Gutman, E.G. (1985). A Role Theory Perspective on Dyadic Interactions: The Service Encounter. *Journal of Marketing*, 49, pp. 99-111.
- Tan, Ş. (2005). Öğretimi Planlama ve Değerlendirme, *PegemA Yayınları*, Ankara, s. 78, 102.
- Tüzün, H. (2006). Educational Computer Games and a Case: Quest Atlantis, *H.U. Journal of Education*, pp. 220-229.
- Wang, Y., Zuo M. & Li X. (2007). Edutainment Technology - A New Starting Point for Educational Development of China, *37th ASEE/IEEE Frontiers in Education Conference*.
- Wooldridge, B.R. (2006). The Power of Perception: An Active/Experiential Learning Exercise for Principles of Marketing, *Marketing Education Review*, 16(2), pp. 5-7.
- Yorita, A., Hashimoto, T., Kobayashi, H. & Kubota, N. (2009). Remote Education Based on Robot Edutainment, *Communications in Computer and Information Science, Volume 44*, pp. 204-213.