



Edutainment software's as eLearning mechanism for adults

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ABSTRACT- This paper has thrown light on benefits and features related to edutainment software which it is gradually becoming the part of a learning process. It has been demonstrated in past research studies that outcomes of learning, obtained because of using edutainment software looks promising. It has been suggested in the article that new generation is moving towards the use of educational games that are highly inclusive in nature. Edutainment software is an effective tool that can be used by teachers and students to develop increased collaboration with each other and it is becoming the prime source of facilitating the process of learning to considerable level.

The aim the paper is to investigate “how effective are edutainment software as eLearning mechanism for adults”. To support the argument, the historical values, advantages, and disadvantages has been be discussed. In the second half of the paper, there is a description on how the digital games are helping us in learning, the comprehensive analysis describe who are the users of Edutainment software, why they use the edutainment software, and by using which tools the software is utilized. To conclude, the edutainment software is an effective alternative of the traditional way of learning. Adult learners find their learning to be interesting and affective with the help of edutainment software. It can further be improved with the help of necessary amendments and cost effectiveness.

Keywords: Edutainment; software; games; education; learning; entertaining

I. INTRODUCTION

Effective environment of education and successful computer games share numerous essential characteristics that are related to interaction and feedback, goals and instruction of academic material and content. Unfortunately, it becomes difficult for large number of educators to implement curriculum strategies that forms a high level of competition with regular computer games. The existing surge in marketability of edutainment software provides an essential framework to students and teachers through which simple strategies can be implemented to enhance classroom engagement (Lauricella, A. R., at el, 2017).

The concept of Edutainment software is not new. Many groups in the United States, Latin America, and United Kingdom have been using the Edutainment software since the 1970s. These countries have been using the edutainment software to deal with such social and health issues as a constituent misuse, inoculation, teenage pregnancy, HIV/AIDS, and cancer (Hogle, J. G.,1996).

The most popular form of the edutainment software in Latin America is the educational telenovela. The producer of Telenovela, Miguel Sabido, from the 1970s to onwards, has joined the communication theory with the health and education messages to edify the audiences all over Latin the America. These educations include several topics, just as, literacy, the family planning, and many other topics. First of all, the Walt Disney Company. They used the term edutainment on 1948 for its “the adventures series.” Entertainment-Education uses a mixture of core theories of communications and necessary entertainment education to guide the groundwork of the software design (Hogle, J. G.,1996).

Educational games have evolved and grown to such a level that have resulted into the creation of interactive platforms of learning that consider a large number of learning theories from situated and social-cultural learning to constructivism. However, with an extensive variety of educational requirements and game genres, it appears that the challenge is whether any one kind of application or game will meet needs of classroom.

The introduction of edutainment software has elicited desired motivation and engagement that is increasingly demanded by educators across the globe. Entertainment and education interlinked to each other because they have an ability to satisfy prime psychological needs for relatedness, autonomy, and competency (Ryan, R. M., & Rigby, C. S., 2019). An effective pattern of learning can be developed through creation of instructional design that is embedded in computer games.

DIGITAL GAME-BASED LEARNING

In majority of research studies, the concept of “Digital Game-Based Learning” (DGBL), refers to mixing educational content with computer games (Anastasiadis, T. at el, 2018). This definition has been provided by Anastasiadis, T. at el in which he talks about the learning process that is interlinked to motivation of learners. “More generally, students’ motives for learning are a combination of essential goals and complementary rewards, combined with psychological factors such as fear and need to satisfy.” A significant and quality-based content is included in academic learning which helps to engage learners with each other. With the help of computer games, player gets engaged in less substantive yet significant environment. An appropriate symbiosis of engaging environment (games) and meaningful content (learning) is facilitated by Digital Game Based Learning, transformed by means of digital media (Anastasiadis, T. at el, 2018).

EDUTAINMENTS

In the past literature, benefits of edutainments have been analyzed from many perspectives. Edutainment software forms an important part of adult’s learning culture. A belief has been developed that computer games provide a useful and meaningful learning environment to adults (Rabah, J., at el, 2018). The design of a game provides adults with a set of academic goals which they plan to achieve in long run. A sense of mission is created using edutainment tool that facilitates the process of learning in an academic environment. Cognitive artifacts are needed by adults such as mathematical computer games, which allow them to present their viewpoints about mathematics (Anastasiadis, T. at el, 2018). As the objective of solving problems get fulfilled through edutainment tool, a sense of success gets created among them. The use of edutainment tool presents a challenge for adults which enforce them to make use of their cognitive skills at an optimum level. An effective learning environment is created by edutainment design that makes its users feel excited and it also enforces them to spend considerable amount of time in learning academic materials and content (Rabah, J., at el, 2018). Sensory stimuli are present in educators which when gets activated using edutainment tools, learning becomes more memorable and enjoyable.

On the other hand, edutainments as a learning tool comes with few challenges to implement. Standard curriculum is not comprehensively covered by majority of edutainment tools. A belief has been developed by teachers that educational content is not covered by edutainment software, there exists a comprehension in academic culture that in majority of the cases educational content does not match with edutainment games. Such issue mostly appears in computer games that were specifically created for meeting the targets of entertainment industry (Dubakov, A., & Olar, J. (2019)). Another challenge of edutainment software is how to maintain a balance between education and entertainment as they are two distinct fields of study. At times, the games become so much exhausting or even amusing that an adult learner either start to show complete interest or he loses his interest wholeheartedly. For example, in large number of edutainment games, isolation is present in learning substances and computer games to such a great extent that player may ignore the aspect of educational content present in it. A large number of technical barriers are experienced by teachers because they are facing certain issues about maintenance matters and modern hardware issues. Another issue that is being faced by adults while making use of edutainment software is shortage of expertise and professionals who do not have sufficient information to handle external sources of edutainment software (Dubakov, A., & Olar, J. (2019)). Moreover, cost has been classified as one of the most important obstacles in creating an edutainment software. The implementation costs are hindering the implication of edutainment technologies in educational institutions.

II. EDUTAINMENT METHODS

Major edutainment methods may include structured scenarios which are rigorously used by educational simulations with a highly refined set of strategies, challenges and rules, which are effectively developed to create particular competencies that can be transferred directly into real world (Nikolayev, M., at el, 2020). Games- are another method which includes activities that allow adult learners to engage in fun and entertainment. Through use of games, adult learners can gain an increased exposure to specific set of ideas, motions, and tools. All games are played in a virtual or synthetic world structured by requisite tools, feedback mechanisms and specific rules to get essential support (Anastasiadis, T. at el, 2018). Virtual worlds related to games method, include 3D persistent, multiplayer social environments, virtual reality, simulation, and many other forms that emphasis on specific goal such as moving to the upcoming stage or scenario navigation (Anastasiadis, T. at el, 2018). Tele-teaching and tele-learning systems as an edutainment method starts with the use of video technology to transfer information in one way which is from the teacher to the audience. Due to this method limitations, smart tele-teaching and tele-learning systems has evolved. It is a high-power telecommunication technology that enable an interaction among users. It may include a package of video cameras, audios facilities, animations, microworlds, PowerPoint files, supportive web pages and whatever keeps the audience entertained and motivated (Hogle, J. G.1996).

THE POWERFUL LEARNING ENVIRONMENT

To introduce the appropriate use of edutainment tools, the powerful learning environment will be discussed. Learning opportunities is a vital component of a powerful learning environment, which are designed by teachers that ensure students participation in different activities of empowerment (Jukema, J. S. at el, 2019). It also helps students to develop an understanding that learning is an activity and mistakes are forms natural part of learning.

Moreover, to create powerful learning environments, it is important for teachers to adopt learning skills of 21st century. This allows for effective delivery of educational content. Utilizing number of different technologies that aids process of learning to considerable level would help achieve that. Real life situations and interests are also embedded in instructional based learning to increase its effectiveness. Teacher associates key ideas and concepts with explanations and examples. They also make use of multiple representation, understandings, and prior experiences to promote an effective pattern of learning. To encourage effective participation, high level of collaboration is made between instructors to develop interactions among and between numerous disciplines, lesson connections, and dynamic learning which is the session that has both ways communication and contribution (Dubakov, A., & Olar, J. (2019).

In addition, knowledge constructive rather than knowledge transmission is key to the effective learning environment, whereas the learner engagement and interaction with the environment and the technologies and the other members in this environment will lead to knowledge constructive (Jukema, J. S. at el, 2019).

EFFECTIVENESS OF EDUTAINMENT TOOLS

Effective edutainment tools are those that have a contribution to a learning process and characteristics that are linked to characteristics of the powerful learning environment. Therefore, an Effective edutainment tool must have a clear and simple directions to avoid user confusion and to deliver the purpose of the tool. At the same time, it should create or increase the learner engagement and involvement in the learning process. This could be done by using the entertainment side to simulate the learner psychological challenge and fantasy needs (Utami, S., & Koesmijati, E. ,2020). It is better to be a dynamic tool that enables feedback, communication, and interaction from all parties to satisfy one of the most important powerful learning environment criteria. In addition, Multiple representation of edutainment software that helps eliminate the aspect of oversimplification and real-world complexities is key (Hogle, J. G.,1996).

Effective and sophistication edutainment tool should be aligned with learner age and individual intellectuality. It should have balance between education and entertainment. Entertainment should be the way to capture the attention and to gain the other benefits not to distract the learner or waste time (Utami, S., & Koesmijati, E. ,2020). Effective tools content should satisfy the desired learning outcomes and be free of gender or ethnicity.

BARRIES THAT LIMITS EDUTAINMENT INTEGRATION WITH THE LEARNING PROCESS

Edutainment software/games have limited use due to which they are may considered as not effective means of promoting education. Such tools are often considered as a valuable source of increasing entertainment, specifically during leisure times. However, apart from these limitations, edutainment software or games face increased level of cost and physical barriers, due to which their implementation is not considered as feasible. Educational institutions face problems of hardware implementation, technical difficulties, and issuance of license due to which a high level of restriction considered as a major edutainment implementation barrier (Nikolayev, M., at el, 2020). Also, technology is an ongoing process, thus, continuous innovation is needed.

It often becomes the prime reason for distracting the attention of a user only towards the “entertainment” aspect of the game. However, some edutainment tools are so complex to understand, that it eliminates the element of “interactivity” from learning process. In such case, edutainment tools along with the learning material may become boring for adult learners. Majority of first-time users find it difficult to go through manual and instruction of the game, therefore it is difficult to link its features to goals of academic curriculum (Utami, S., & Koesmijati, E. ,2020).

SWOT SUMMARY

The previous discussion would allow to discuss a brief comparison of SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis for edutainment software:

Strengths:

Edutainment software/game fosters process of learning. It is an effective tool that makes learners to enjoy the process of learning through use of interactive games. It can be customized and tailored to the curriculum needs. It has been concluded that it is favorable from audience than traditional learning. Moreover, mobility is a bonus because these tools could be adaptable with different platforms (Stapa, S. H., & Ibaharim, N. I., 2020). Also, edutainments have the ability to reach a pictorial description.

Weakness:

Edutainments software’s and tools found to have the disadvantage of cost and technical / programming support needs. Also, in some cases, such tools may be not fully reliable due to uncontrolled related issues. In the learning process, It may over consume learner’s time and drive learners attention of learner to only “entertainment” aspect of the game is possible (Dubakov, A., & Olar, J. (2019).

Opportunities:

The rapid development in digital and programming business is promising. There is always the opportunity to add new features in edutainment tools to make it more appealing for users.

In addition, edutainment allows the opportunity to reach new audience or existing audience in a different or more effective way because educators see edutainment tools as eLearning mechanism or a mean to reach a goal. Regarding the cost aspect of edutainments, the possibility of online learning is gradually becoming a funding source for educational efforts.

Threats:

Any new substitute in market will brings serious threat to the use of edutainment market. In terms of personal use, edutainment tools could be addictive in cases a backfire. Therefore, political, governmental, or educational rules and policies that may be inconsistent or not welcoming to the edutainment applications is always a possibility.

III. RESULTS

Edutainment software/games are well known tools for carrying out an integration between education and amusement, which is usually carried out using videos and computer games. The use of edutainment software can enhance numerous learning skills for adults such as decision-making skills, working in the form of a team, analytical skills, and strategic planning (Rabah, J., at el, 2018). Through the use of edutainment software,

users become able to develop high level of interaction with other members of society, they become able to explore innovative concepts in the field of education and it also fosters their ability to work in the form of a team or group. By playing various kinds of edutainment games, users become involved and simulated in interesting environment of learning. It also assists adult students for transferring the complex matters into simple ones that are attractive and easy to understand and learn (Rabah, J., et al, 2018). There are different factors which contribute to the effectiveness of edutainment software use. Such software providing a flexible means, which allow users to repeat the examination and put their plans in a specific period.

Although their need for implementation and development cost and their need for technical and programming assistance, edutainments have characteristics and advantages for it to be useful and effective learning tool. There are management advantages of using edutainment games that can be applied in different fields of education such as architecture, and cognitive artifact (Dubakov, A., & Olar, J., 2019). Another major benefit of using edutainment software is that it keeps learners motivated to explore innovative ideas and concepts. Moreover, it also helps in enhancing the attention of learners towards academic materials, giving that they can bring considerable improvement in their grades. Overall, the analysis shows that there are more benefits of edutainment tools than its limitations (Lauricella, A. R. et al, 2017).

IV. CONCLUSION

Digital Play Based Learning is a process that pertains to unstructured and circular act of learning process in games. It can be featured as a learning act that is experienced from certain instances in a virtual open environment of learning. The basic aim was to inform learners about their experience horizon and to relativize their premature beliefs and prejudgments. Therefore, learning based on entertainment not only associate learner by challenge and entertainment, but by passion and confrontation. It can therefore be concluded that use of edutainment software is not an exchange of Digital Game-Based Learning, but it lays greater emphasis on a differentiated aspect of playing and learning. Education is a process of developing, learning, and teaching learning strategies through developing knowledge, character, and skills. Edutainment and educational games are methods of education that brings out mentality and creativity of learners at a common platform. These systems of technological learning engage learners to gain knowledge by maintaining full control over the system, mainly by using interactive learning methods and colorful animation (Dubakov, A., & Olar, J., 2019). Edutainment tools and games create a learning, yet recreational environment that strive to enlarge encouragement level of learners, by implanting activities of education in highly interesting collaborations. While developing a comparison between traditional classroom instructions with efficiency of edutainments, it was noted that games are highly effective in particular domains.

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