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# Iraqi EFL Students' Perceptions Towards Entertainment And Rigorous Learning

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## Abstract

This study aims to investigate Iraqi students' perceptions towards entertainment and rigorous learning at the College of Education for the woman/university of Tikrit. Educational computer game research expanded rapidly as a result of the widespread Perception among younger generations that games might provide several educational advantages. It is useful to understand how educational games can help strengthen the engagement and learning perceptions of our students towards technology in the light of intensive teaching activities and the actions of teachers to build a respectful, constructive learning atmosphere for the conduct of students towards each other and the rate and level of involvement of students in class discussion. The tool of the study is a questionnaire checklist from strongly agree to strongly disagree. The sample of the study consists of 82 (female) participants at the English department/university of Tikrit. This paper investigates two aspects of learning and comprehensive learning for educational games. The results demonstrated that the majority of students were more motivated to learn programming through the use of games than through traditional methods, fostering hopeful attitudes. Hopefully, the results would serve to enrich information in recognizing the attitudes of students about educational learning games, with the outcome of the exchange for rigorous learning revealing that students have negative perceptions about several points that respect teachers for students, weak cooperative work, and guidelines for respect during class conduct.

**Keywords:** Entertainment, Rigorous learning, EFL, Gamification



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## 1. Introduction

Based on the highly motivating nature of video games and the behavior of the present generation of students, researchers argue that educational games (EG) can provide students with various effective learning opportunities (Chang & Chou, 2008:1-14).

A study by Garzotto (2007:54) demonstrated that multiplayer video games had both emotional and cognitive learning benefits. During the gaming session, children were seen to be engaged, motivated, and enthusiastic about the games. EG offers a vast array of activities that can inspire pleasure, relaxation, learning, and teaching in several fields. The effectiveness of games in teaching has also been demonstrated by a number of research. According to them, games improve learning, provide immediate feedback, increase service capacity, and influence behavioral and attitude changes. The motivation provided by games might therefore be viewed as a reason to further investigate their educational applications (Sugimoto, 2007:74).

## 2. Theoretical Background of Edutainment and Rigorous Learning

### 2.1 Entertainment and Education

It seems to be eminently feasible to make a game useful for the study that is both entertaining and interactive, but it has been unusual so far. Exceptions are available. A reasonably realistic urban growth simulation is created by SimCity and is very popular, entertaining, and educational. It is feasible to apply the components of the study mentioned above to a game like this. As a by-product, such a game would also have an educational aspect, as it would allow players to better grasp the tradeoffs intrinsic in strategic decision-making.

For researchers, there is a strong opportunity to use video games as educational instruments for natural ecosystems. A game will foster core principles underlying ecosystem services systems in realistic, hands-on environments by giving players the ability to navigate a landscape. The aim is to include players in the creation of better organizations, better societies and, thus, a better society. Latest research shows that pro-social games can affect pro-social actions positively (Gentile et al. 2009:752).

Edutainment presents a blend of two streams: education and amusement combined into one. There are several research fields, however, the bulk may be grouped into two categories:

1. The instructional application of entertainment elements; and 2. Integration of the instructional component into television. Although we are examining the broad spectrum of edutainment in this article, a new body of work uses this term to refer to game-based learning. The objective of merging two seemingly distinct methods is to facilitate the learning process by incorporating entertaining elements. Entertainment-Education-Major educational pedagogy includes:

- Relevance: As individuals can see the utility of the information they are offered, learning is more possible.
- Incremental learning: Where individuals can learn at their own speed, learning is more successful.
- Distributed Learning: Over various times, different persons learn in different ways. In order for people to absorb it, it is necessary to view knowledge differently (Zorica,2014: 4089).

Initially, edutainment was mainly focused on informal learning and was integrated into the entertainment industry with educational components. Alternatively, schooling is a rising alternative to the standard education system (Zin & Zain, 2010: 2865).

Edutainment is a medium of entertainment aimed at both informing and entertaining. Usually, by incorporating lessons into a familiar medium of entertainment, it aims to teach its audience: TV shows, computer and video games, interactive apps, and so on (Cuccu, 2009: 276).

Zorica, (2014:4091) describes edutainment as instructional and fun video games, TV shows, or other content.



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According to Buckingham & Scanlon (2005:41), edutainment is a hybrid genre that largely focuses on graphic material, story or game-like modes, and more informal, less didactic addressing kinds. To put it simply, Gros (2003:6) describes edutainment as education that has been forced within the entertainment system. In addition, he focuses on game-based learning, noting that this type of software is made for parents and instructors and is primarily intended to focus on academic subjects, whereas corporate gaming software is created for the sole goal of entertaining target audiences.

On the other hand, Okan (2003:255) defines edutainment as a hybrid kind of gaming that largely depends on aesthetics, stories, or game genres but also contains some sort of educational objective. The primary objective of edutainment is to promote student learning through experimentation, interactive material, trial and error, and reinforcement in such a way that students are so engrossed in the enjoyment that they are unaware they are also learning.

Two key aspects (common for both entertainment and education) are a combination of the terms entertainment and education: format (which is an element of entertainment) and message/content (educational component). The entertainment portion is one that fluctuates and may be regarded in different ways, i.e. changing when the media utilized changes when the content ceases to be the primary focus when it must be transmitted in any form. However, edutainment is comprised of medium-based elements such as information and communication technology (ICT), cinema, new media games, and education (Zorica, 2014:4093).

### 2.2 Edutainment Types

(Zorica, 2014:4094) says that from the middle of the twentieth century, media consumption has revolved around the educational atmosphere through the instructional use of movies and television. As previously noted, the significant transformation in this field began with the emergence of the web 2.0 environment, technological innovation, and individualization. These highlighted certain edutainment features. The largest improvement came, as expected, in the section on interaction. In addition to customizing our watching areas and increasing our participation, we shifted away from being passive TV, cinema, and radio watchers. Some components are still in their infancy, yet future pathways are visible. Taking this into account while analyzing modes of edutainment, all hybrid forms of edutainment are confirmed to be immersive or participatory but non-interactive. While his first study centered on athletics, it may also be considered in a broader context and applied to the entire field. In addition, his corporate perspective-based classification provides a more thorough classification of edutainment forms:

• Location-based: immersive and collaborative, in which the user becomes a member, and non-interactive or spectator, in which the user may just sit and view (movies, science shows, museums, and zoos).

• Purpose and content: comprises informal education to improve the life management of learners and skills education to provide experiential learning opportunities, such as simulations.

• The target audience is both age- and motivation-based (learners who get equal consideration) (learners who have the same age).

• Media types: television editing, machine education, and internet education.

#### 2.2.1 Video

Although the influence of video and multimedia technologies on educational performance is a subject of ongoing research, three fundamental principles should be sufficient to outline the pedagogical impact of video. Because video includes several forms of data (pictures, action, sounds, and text) in a complimentary manner, learning may be customized to the diverse learning styles and unique learning speeds of students with more ease than with other resources. By pausing, rewinding, fast-forwarding,



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and repeating material as much as possible, the student has greater control over the data he receives from video and a higher opportunity for a more profound understanding (Zorica, 2014:4095).

Individual flexibility of the learning rate enables students to replay portions of a lecture several times and feel as though they are learning more effectively. YouTube or Teacher Tube is the most well-known example of video as an edutainment medium that was later used for educational purposes. There are also negative repercussions associated with technological difficulties and copyright, highlighting the transitory nature of these movies in terms of their long-term utility. Videos and sharing tools, on the other hand, promote the development of social skills. Students develop a successful element of learning (teaching others) when they are permitted to produce and share movies with their classmates as part of their learning environment (ibid:655).

The introduction of "Khan Academy" and its increasing success have contributed to a slight decline in the usage of videos in education. While it was first presented as the answer to the educational problem, it turned out that there was only a technical alteration in the basis, i.e. the format, and the concept remained same. Nonetheless, it represented the alternative methodological approach to study, namely the flipped classroom, as a result of technology advancement. Allowing students to view lectures at their own leisure, freeing up class time for discussion, problem-solving, and studying. The future benefit of this service is the contact with the instructor, as well as the students, in order to track the achievement of the student via the dashboard of the instructor. Even, the website gives technology in the form of actual edutainment that generates practice problems and awards success with badges resembling those seen in video games. Khan Academy provides the first thorough embodiment of a goal that many have had since the emergence of computers and internet video: that every student should have access to a great explanator and could view the teacher's explanations as many as the student desires (Multisilta, 2014:656).

**2.2.2 Video-games (game-based learning or gamification)**

Bryce and Rutter (2003:5) demonstrate that associating schooling and learning with clear, lively, and joyful experiences is not new. Digital games have been around for more than 25 years, but the college students of today have grown up playing digital games. Games have altered the way that modern students think, however some educators are reluctant to shift their teaching or incorporate games.

Students develop a variety of skills, including strategy and problem-solving, through playing computer games. Playing games astonishes students, arouses their curiosity, enhances their creativity, and provides enormous enjoyment and a sense of accomplishment. Because their stress level is reduced, adults and children are more likely to pay attention, contribute actively, and be more receptive to learning while they are having fun (Zin & Zain, 2010:2865).

Prensky (2001:243) notes that play, a voluntary activity, is intensive and absorbing and promotes the formation of social groups. Both components are readily applicable to the learning environment. Students in higher education are typically more interested in sports. Educators have recommended utilizing the engaging and motivating qualities of entertainment games to enhance learning, regardless of whether the game is played on a computer, game console, portable screen, or touch screen. There are a number of gaming genres, such as role-playing games, fantasy games, virtual reality games, and first-person shooters, that have elements that are very different from those of this game. Rules, games and cultural settings can be used to depict computer games ( Tang, Hanneghan & El Rhalibi, 2009:10).

To help the play action, rules and culture determine the technological and intrinsic image of any virtual "playground." Learning, game efficiency, and motivation are influenced by three modes of play (individual, competitive, and collaborative). Games-based programming may be incorporated or introduced into current curricula to complement existing learning approaches.

Since learning needs work, the most important reason why we need inspiration is that learning requires effort. Learning is also motivated by our genuine requirements in the real world, such as the need to



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live and make a living. The teacher's traditional job in artificial training and education environments was to provide inspiration (Wankel & Kingsley, 2009:56).

**2.2.2.1 Educational Games Design Characteristics**

The origins of EG architectural issues are numerous, including psychology, education, and technology (Grassioulet, 2002:24). Games include both people and technology, therefore special attention must be paid to both. Incorporating the 'educational' aspect of the games itself created an additional component - education, a complicated issue that has been handled for a very long time. Due to human and technological advancements, education has evolved and continues to advance. Educational games are a subset of both play and enjoyment, with a focus on education. Olga, Voroblakov, Kataev, and Tarasenko (2008) define it as a learning mechanism that implements any or all components of the learning process (learning theory). development of skills and experience, and estimate of information level) in a gaming setting.

Jaspaljeet (2008:76) defined educational games as those expressly meant to educate persons about certain topics, to extend their understanding, to enhance their growth, to help them comprehend a historical event or culture, or to assist them in developing a skill as they play. Educational video games are often games that combine both the ideas of game design and learning theory, as well as the insertion of learning content of certain themes or learning outcomes that are intended to enhance the learning of target audiences. Psychology defines Perception as a single coherent perception generated from sensory processes in response to a stimuli. As a means of assessing our students' comprehension of game-based learning, we use instructional games as the stimulus. The games will be designed from a pedagogical standpoint in accordance with the course's learning outcomes and the actual course outline (Fisch, 2005:103).

The learning outcomes will be based on Bloom's first three levels of taxonomy: awareness, interpretation, and application. Another notion is scaffolding, which is utilized to offer input in the form of learning content to enhance students' learning experiences (Graci, 1992:247).

**2.2.2.2 Model for Educational Games Design**

Input-Process-Outcome Game Paradigm paradigm for integrating literature on educational games. They concluded that the most essential aspect of employing games is motivating students to become self-directed and self-motivated, both intrinsically and extrinsically. They believed that a tacit learning paradigm is inherent in the majority of educational game research. Second, the objective is to design instructional software that incorporates games with certain features or capabilities (Garris et al, 2002:451).

Second, these features result in a feedback loop comprising user decisions or reactions, such as satisfaction or interest, user habits, such as increased persistence or time on task, and further system input. This cycle leads in repeated and self-motivated game play to the extent that we successfully match instructional content with appropriate game functionality. Lastly, this enthusiasm in gaming adds to the achievement of training objectives and tangible learning results. This is in accordance with our objective for the development of our online games, which is to encourage self-motivation by utilizing online games to teach programming. Consequently, we deemed it appropriate to use this paradigm to our game design. The self-directed gaming learning approach advocated for educational games. As stated in the next section, the model is operationalized (ibid).

First, as explained in the preceding section, the model combines web-based learning content with some online game features. Second, this paradigm establishes an online gaming universe with surrounding information services and game operations. Frequently, the games initiate a feedback loop requiring learner input on multiple sub-game tasks that employ game rules and game-based scaffolding techniques. Lastly, these game-play techniques lead to the achievement of learning outcomes. In this



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context, iterative tasks are regarded as recurrent judgment-behavior-feedback loops employed in game play. In other words, game play adds to a variety of user decisions and responses, including greater engagement, satisfaction, involvement, and trust. The objective is to have the player continuously return to the game action over time. This repetitious task and activities are designed to develop students' understanding of programming principles to an acceptable degree, as indicated in the learning outcomes (Garris et al, 2002:455).

**2.3 The Concept of Rigorous Learning**

Rigorous instruction is the bridge from our schools to the long-term career achievement of our students. In the increasingly dynamic world in which they will live and work, intensive learning develops in students the skills, expertise, attitudes and abilities that will enable their progress. To ensure that all students attain comprehensive learning, it is essential to instruct each student in a manner that is suited to him or her. It entails cultivating caring, compassionate relationships with ALL students and training in interpersonal skills. It demands teaching in ALL pupils the career-relevant skills necessary for adult independence (Daggett & Gendron, 2015:3).

**2.4 Defining and Recognizing Rigorous Learning**

Educators fail to articulate what difficult education is and how it feels in the classroom. Without a widely accepted idea of intensive learning, it is impossible to evaluate the efficacy of instruction and the success of students. If schools do not consistently provide teachers and administrators with professional development focused on rigor and importance, they will at best remain stagnant. We developed the Integrated Instructional Review Framework in an effort to assist educators in defining complete learning standards so that they may regularly incorporate them into instruction (CIR). CIR is a four-step coaching approach that emphasizes open, honest, and ongoing discussion with leaders and students, and is designed as an action plan for rigorous learning. The objective is to replace controversial, frequently useless assessments with a coaching approach that encourages teachers to offer challenging learning in the classroom rather than punishing them for mistakes or weaknesses (ibid).



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| RUBRIC CATEGORIES | INDICATOR DESCRIPTIONS | | |
|---|---|---|---|
| **Rigor** | **Thoughtful Work:** Lesson prepares pupils to accomplish a variety of high-quality learning objectives. | **High-Level Questioning:** Lesson provides opportunities for students to react to and ask a variety of questions with increasing degrees of rigor and depth of thought. | **Academic Discussion:** The lesson offers chances for students to engage in academic conversations rich in language with professionals and peers. |
| **Relevance** | **Meaningful Work:** Students are required to accomplish meaningful, real-world tasks that correspond to duties frequently performed in related occupations. | **Authentic Resources:** Lesson incorporates a variety of information sources and requires students to apply information from sources to complete pertinent, real-world activities. | **Learning Connections:** There are several opportunities for pupils to establish connections between what they are learning and real-world applications throughout the lesson. |
| **Engagement** | **Active Participation:** The lesson is designed to maximize student participation throughout the duration of the class. | **Learning Environment:** The classroom setting emphasizes a culture of respect and dedication to study. | **Formative Processes and Tools:** Lesson is adapted to meet the requirements of all students, including planning for differentiated teaching based on the outcomes of formative tools and procedures. |

Description of Rigorous learning. Adopted from (Daggett & Gendron, 2015:3)

### 2.5 Delivering Rigorous Learning for All Students

Twenty-five years ago, as a guide to help schools educate ALL students in a manner that qualified them for college and jobs, we created the Rigor/Relevance System. The Paradigm was born from the discovery that technology was pushing progress at a faster and faster pace, and that what students needed to know would change along with it for good lives in an increasingly technology-based environment. This assertion was then valid, and today it remains true. As a guide for educators to devise lesson programs that achieve clear Quadrant D learning, the Rigor/Relevance Paradigm. True rigor and relevance take place in Quadrant D. When learners in Quadrant D are practicing, they are learning to think analytically and creatively. Their reasoning is complicated and they learn the skills to adapt knowledge flexibly to a multitude of real-world scenarios, including unexpected ones. In other words, in dynamic professions, they are beginning to think in the manner they would need to (Daggett & Gendron, 2015:5).



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## 3. Methodology

### 3.1 Participants

The research was performed at the college of education for Women/ University of Tikrit with (82 female) English department students, in the 4th stage. During the academic year, samples are chosen randomly (2021-2022).

### 3.2. Instrument

The instrument for data collection (questionnaire) consists of two sections. The first part is the Perception of students towards entertainment learning; the second part is the Perception of students towards rigorous learning. The checklist of the questionnaire was adopted by Ibrahim, & Jaafar, (2011) and Matsumura & Crosson (2008). The Likert-scale is used as part of the questionnaire; the first part consists of 14 items, and the second part consists of 15 items. The responses to the scale varied from "Strongly Agree (5)" to "Agree (4)" to "Neutral (3)" to "Disagree (2)" to "strongly Disagree (1)".

### 3.3. Validity

The instrument is correct if it correctly measures what it is meant to calculate (Ebel, 1972: 555). To guarantee the face validity of the questionnaire, members of the teaching team of the jury university who ensured the face validity of the assessments were subjected to it. Each juror is asked to state comments and recommendations on the suitability of the specifics of the questionnaire, see the table (1)

Table (1):Names of Jury Members

| No. | Name | Specialty | Position |
|---|---|---|---|
| **1.** | Prof. Dr. Amra I. Sultan | TEFL | College of Education for the Humanities / University of Tikrit. |
| **2.** | Asst. prof. Dr. Dunia Taher Hameed | TEFL | College of Education for the Humanities / University of Tikrit. |
| **3.** | Asst. Prof. Manal O. Mousa | TEFL | College of Education for the |

### 3.4 Reliability

Reliability is defined by Brown (2003: 98) as the degree to which the results can be considered stable or accurate. To find out about the questionnaire's reliability. The Cronbach Alpha Coefficients were determined in order to assess the efficacy of "student perceptions of entertainment learning and student perceptions of rigorous learning." In group comparisons, reliability values between 0.78 and 0.77 are acceptable, (see table 2).

Table (2)

| | ***Alpha Cronbach*** |
|---|---|
| *1-students perceptions towards entertainment learning* | 0.78 |
| *2- students perceptions towards rigorous learning* | 0.77 |
| *Total* | 0.82 |

## 4- Data Collection

### 4.1 Data Analysis Related to the Questionnaire

The following statistical values are found after measuring the percentages of student expectations of entertainment learning, as mentioned in Appendix A of the questionnaire, See Table (1).



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Table (1):Percentages of Learners' Responses Concerning Entertainment Learning

| No. item | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| **1.** | 57 | 69.5% | 24 | 29.3% | 1 | 1.2% | 0 | 0% | 0 | 0% |
| **2.** | 62 | 75.6% | 9 | 11.0% | 11 | 13.4% | 0 | 0% | 0 | 0% |
| **3.** | 59 | 72.0% | 23 | 28.0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **4.** | 64 | 78.0% | 18 | 22.0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **5.** | 72 | 87.8% | 10 | 12.2% | 0 | 0% | 0 | 0% | 0 | 0% |
| **6.** | 78 | 95.1% | 2 | 2.4% | 1 | 1.2% | 0 | 0% | 1 | 1.2% |
| **7.** | 50 | 61.0% | 29 | 35.4% | 2 | 2.4% | 1 | 1.2% | 0 | 0% |
| **8.** | 44 | 53.7% | 38 | 46.3% | 0 | 0% | 0 | 0% | 0 | 0% |
| **9.** | 35 | 42.7% | 43 | 52.4% | 0 | 0% | 4 | 4.9% | 0 | 0% |
| **10.** | 48 | 58.5% | 26 | 31.7% | 8 | 9.8% | 0 | 0% | 0 | 0% |
| **11.** | 71 | 86.6% | 10 | 12.2% | 0 | 0% | 1 | 1.2% | 0 | 0% |
| **12.** | 64 | 78.0% | 18 | 22.0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **13.** | 56 | 68.3% | 18 | 22.0% | 1 | 1.2% | 7 | 8.5% | 0 | 0% |
| **14.** | 70 | 85.4% | 3 | 3.7% | 0 | 0% | 9 | 11.0% | 0 | 0% |

The collected responses on the students' Perception towards entertainment learning of the questionnaire items are summed up in the following points:

- Most students strongly agree with the point of thinking that educational games activity gives more benefits than another method. The percentage is (69.5%).

- The majority of students strongly agree with the preference for the answer of questions with educational games more using books or paper with percentage is (75.6%).

- Most of the students enjoy using educational games for learning in the future with a percentage of agreement is (72.0%).

- A high percentage of students prefer to do exercises in educational games rather than quizzes during class with a high percentage (78.0%).

- The majority of students prefer to use computer games that makes this subject more interesting during the Educational process. The percentage of agreement is (87.8%).

- A high percentage of students agree with the idea of education through educational games better than the traditional method with a percentage of agreement is (95.1%).

- Most learners strongly agree that Educational games can learn according to their own pace and sequence with a percentage is (61.0%).

- Many students prefer an idea of educational games that is more flexible in determining learning time with a strongly agree percentage is (53.7%).

- (52.4%) of students agree with the point that games more flexible for choosing a learning place.

- Most participants strongly agree that the content of the education games matches the subject syllabus with a percentage is (58.5%).

- A high percentage (86.6%) of students strongly agree with having more opportunities to learn through educational games.

- Most learners prefer using games to learn compared to traditional methods in a class with a high percentage is (78.0%).



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- Most of the respondents prefer learning computer subjects through games with a percentage is (68.3%).

- A high percentage of participants prefer to participate in educational games online with a high percentage is (85.4%).

The following statistical values are found after measuring the percentages of the Perception of students against rigorous learning items, as stated in Appendix (A) of the questionnaire, as it is shown in Table (2).

Table (2):The Percentages of Students Responses towards Rigorous Learning

| No. item | Strongly Agree | | Agree | | Neutral | | Disagree | | Strongly Disagree | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | Percentage | N | Percentage | N | Percentage | N | Percentage | N | Percentage |
| 1. | 0 | 0% | 27 | 32.9% | 2 | 2.4% | 2 | 2.4% | 51 | 62.2% |
| 2. | 0 | 0% | 27 | 32.9% | 16 | 19.5% | 39 | 47.6% | 0 | 0% |
| 3. | 0 | 0% | 11 | 13.4% | 8 | 9.8% | 4 | 4.9% | 59 | 72.0% |
| 4. | 18 | 22.0% | 19 | 23.2% | 10 | 12.2% | 35 | 42.7% | 0 | 0% |
| 5. | 0 | 0% | 19 | 23.2% | 3 | 3.7% | 42 | 51.2% | 18 | 22.0% |
| 6. | 0 | 0% | 64 | 78.0% | 0 | 0% | 6 | 7.3% | 12 | 14.6% |
| 7. | 18 | 22.0% | 49 | 59.8% | 0 | 0% | 15 | 18.3% | 0 | 0% |
| 8. | 0 | 0% | 41 | 50.0% | 2 | 2.4% | 15 | 18.3% | 24 | 29.3% |
| 9. | 19 | 23.2% | 24 | 29.3% | 18 | 22.0% | 19 | 23.2% | 2 | 2.4% |
| 10. | 18 | 22.0% | 49 | 59.8% | 0 | 0% | 15 | 18.3% | 0 | 0% |
| 11. | 0 | 0% | 41 | 50.0% | 2 | 2.4% | 15 | 18.3% | 24 | 29.3% |
| 12. | 0 | 0% | 41 | 50.0% | 2 | 2.4% | 15 | 18.3% | 24 | 29.3% |
| 13. | 18 | 22.0% | 49 | 59.8% | 0 | 0% | 15 | 18.3% | 0 | 0% |
| 14. | 0 | 0% | 41 | 50.0% | 2 | 2.4% | 15 | 18.3% | 24 | 29.3% |
| 15. | 18 | 22.0% | 0 | 0% | 49 | 59.8% | 15 | 18.3% | 0 | 0% |

The collected responses on the students' Perception towards rigorous learning of the questionnaire items are summed up in the following points:

- Most of the students did not agree with the idea that the teacher respects the students during the rigorous learning with a percentage is (62.2%).

- Most students reject the idea of cooperative work during rigorous learning with a percentage is (47.6%).

- The majority of students reject that there are rules of respect within the classroom during rigorous learning with a percentage is (72.0%). And that one of the most important reasons for this point is behavioral reasons.

- Many students also reject a point that teacher presses for evidence during rigorous learning with a percentage is (42.7%).

5- Most students did not agree with this idea that teacher links student contributions to each other during learning process with percentage is (51.2%).

- Most students agree with the principle that the teacher is rigorous during a discussion in the classroom with a percentage is (78.0%).

- Most students also agree that the teacher is rigorous about the course material. The percentage is (59.8%).



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- Most of the participants agree that the teacher is rigorous during the class activity with a percentage is (50.0%).

- Most students agree with the point that the teacher is rigor in expectations in the learning process with a percentage is (29.3%).

- Most students agree that during rigor learning the teacher is clear in expectations with a percentage is (59.8%).

- Most students agree with the idea of reaching expectations through the rigors of instruction with a percentage is (50.0%).

- (50.0%) of students agree that learners respect each other during the learning process.

- The majority of participants agree with a point that students participate in class discussions through rigor learning with a percentage is (59.8%).

- Students link contributions to others during the learning process with a percentage of agreement is (50.0%).

- Most learners are neutral towards the point that students provide evidence of opinions in the classroom with a percentage is (59.8%).

**4.2 Discussion of the Results**

According to this survey, students were enthusiastic about incorporating games into their educational experiences. In reality, kids have showed a great deal of enthusiasm for incorporating educational games into their assignments, and games enhance the content in some way. This shown that for some courses, such as those with low student motivation, games may be adequate. The usage of games is one approach that may be used to pique students' interest in studying. Students frequently exhibit hopeful attitudes and have seen their cognitive improvement, such as logical reasoning and challenging their topic knowledge, via the usage of games. Consider the game interface crucial since it should be effortless for students to navigate the games; otherwise, it can create frustration and lead to the abandonment of the games.

They showed tremendous interest in incorporating games into their educational process. Due to the youth of educational games, a number of game design issues, including game genre, design for varied learning outcomes, design for different learning styles, and students, require careful study. In addition, educational game production is not a straightforward process due to its interdisciplinary requirements, such as software developers, content specialists, and instructional designers, as well as customer expectations. Future development will improve the game's architecture, including environments, navigation, and experiences, as well as the integration of programming material. Then, before but after utilizing the games, we may provide further examinations to evaluate the pupils' programming skills.

According to rigorous learning, the findings give support for research that suggests examining the relationship between the regularity of the classroom environment and rigorous instruction and the experiences of students. Most pupils have unfavorable views about arduous academic work. Students' respect for one another and the degree to which they accepted each other's contributions in class discussions were not connected with teachers' expressions of gratitude, according to the findings. Participation in cooperative work in classrooms was not correlated with the extent to which students appreciated their contributions during class discussions. With student participation in classroom debates, the posting of norms for courteous, pro-social student behavior in classrooms reveals negative emotions.



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Regarding the relationship between educational rigor and student relationships, the extent to which teachers encouraged students to endorse their claims in class discussions and connected the contributions of students to each other, as well as the general rigor of class discussions, were not unexpectedly related to student engagement, students relating their own to the contributions of their peers, and students' contributions. These student experiences and student involvement were not connected with the rigor of curricular content, as demonstrated by the students' evidence. In class discussions, the difficulty of the lesson activity was proportional to the extent to which students supported their arguments with evidence. The consistency of instructors' goals for student learning was connected with the rate and quality of student participation in class discussions and student behavior toward their peers. This was not surprising, given the objectives communicated to students during our assessments were virtually exclusively limited to instructional duties (e.g., what students needed to include in their work to get a good grade). The second phase of our study consisted of using multiple linear regression analysis to develop a model for predicting the behaviors of students against one another and the total and type of student participation in a class discussion of educational quality metrics and the classroom environment. Specifically, the purpose of these research was to assess the relative impact of classroom atmosphere and teaching quality on actual student experiences.

## 5. Conclusions

A combination of two streams is presented by edutainment: education and entertainment combine into one. It seems to be eminently feasible to make a game useful for study that is both entertaining and instructional, but it has been unusual so far. A reasonably realistic urban growth simulation is created by SimCity and is very popular, entertaining, and educational. For biologists, there is a strong opportunity to use video games as educational instruments for ecosystem services. The aim is to include players in the creation of better organizations, better societies and, thus, a better society. Latest evidence indicates that pro-social games can have a positive impact on pro-social behavior, and this can have a proportional impact on environmental behavior. As previously reported, the big change in this area began with the creation of the web 2.0 climate, technical innovation, and personalization. This took numerous facets of edutainment to the surface, and in the interactivity section, the big shift was.

For all students to achieve thorough learning, it is important to teach each student in a way that is appropriate to him or her. In the classroom, educators fail to define just what intensive instruction is and what it feels like. Schools can tread water, at best, without regularly supplying teachers and leaders with professional development around rigor and significance. A four-step coaching process that focuses on an open, truthful and continuing dialogue between leaders and teachers is the Integrated Instructional Review Process.



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**Appendix (A)**

**Students' Perception toward entertainment learning**

| No. | item | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 1. | I think educational games activity gives me lots of benefits | | | | | |
| 2. | I prefer to answer questions with educational games more using books or paper | | | | | |
| 3. | I am very interested in using educational games for learning in the future | | | | | |
| 4. | I prefer to do exercises in educational games rather than quizzes during class | | | | | |
| 5. | The usage of computer games makes this subject more interesting | | | | | |
| 6. | I can learn better by educational games | | | | | |
| 7. | Games can learn according to my own pace and sequence. | | | | | |
| 8. | games more flexible for me to determine my learning time | | | | | |
| 9. | games more flexible for me to choose my learning place | | | | | |
| 10. | The content of the games match my subject syllabus | | | | | |
| 11. | I wish I have more opportunities to learn using this game approach | | | | | |
| 12. | I prefer using games to learn compared to traditional methods in a class | | | | | |
| 13. | I would like to learn all computer subjects using educational games | | | | | |
| 14. | I wish these games will be available online for easy access | | | | | |



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**Appendix (B)**

**Students' Perception toward rigorous learning**

| No. | item | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|---|
| 1. | Teacher respect for students | | | | | |
| 2. | Opportunity for cooperative work | | | | | |
| 3. | Rules for respect/class behavior | | | | | |
| 4. | Teacher presses for evidence | | | | | |
| 5. | Teacher links student contributions to each other | | | | | |
| 6. | Rigor of discussion | | | | | |
| 7. | Rigor of materials | | | | | |
| 8. | The rigor of lesson activity | | | | | |
| 9. | Rigor of expectations | | | | | |
| 10. | Clarity of expectations | | | | | |
| 11. | Access to expectations | | | | | |
| 12. | Students respect one another | | | | | |
| 13. | Student participation in class discussions | | | | | |
| 14. | Students link contributions to others' | | | | | |
| 15. | Students provide evidence of opinions | | | | | |



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