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The Development of Pedagogical Functions in Entertainment Contents

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Abstract: The entertainment industry in the 21st century has entered an age of exploded diversity. As entertainment products are designed to meet the interests and needs of different groups of people, the range of audience and level of consumption are accordingly expanded. Meanwhile, advanced technologies such as big data algorithms and micro-targeting strategies allowed the information from entertainment content to be more effectively delivered and received. Regarding the powerful impact of entertainment products on audiences, content control of entertainment products has become a frequently discussed topic, while the pedagogical function of entertainment has been discovered in recent years. Edutainment contents are now applied in both the schooling context and the public spheres, where entertainment activities become efficient teaching supplements and methods of cultural popularization. In that sense, to ideally achieve educational purposes through entertainment approaches, a scientific model for the merge of education and entertainment is yet to be found.

Keywords: Entertainment, education, content product, communication, immersive industry

1. Introduction

While entertainment works as highly engaged communication activities with a low threshold of participation, it more effectively delivers information to a wider audience compared to other forms of propaganda. As suggested in George Gerbner's Cultivation Theory [1], audiences are unconsciously influenced by media and entertainment. That said, the audience's values and opinions would be easily manipulated by the common media content; for example, ones who frequently watch violent television programs tend to construct a negative view of the world [2]. In many of the later research, it was also suspected that violent computer games had increased the crime rate among its audience [3]. In that sense, the current pan-entertainment era obtains significant hazards where negative messages could be easily spread, especially within the group of youth, which leads to stricter censorship regulated by the government authority.

On the other hand, public officials and education institutions also speculated on the opportunity of integrating pedagogical content into an entertaining context. Entertainment activities that function as pedagogical materials can also be referred to as "prosocial entertainment, entertainment with added value, pro-development entertainment, infotainment, and enter-educate drama, among other terms [4]".

In Steen and Owen's study of evolution's pedagogy [5], the positive effect of entertainment has been examined with the function of dream, where the two share similar natures In subconscious

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learning. According to Steen and Owen, entertainment, especially in the case of under-aged chase play, is usually conducted without purpose or specific educational goal where children are not aware of the learning process but helps them to build their ability to deal with uncertainties, which allows them to explore the possibility space in actions and sequencing of events [5]. Similar to the function of dreams, play helps to gain information and experiences with no conscious intention to learn.

In this context, more edutainment activities are employed with serious attention, while edutainment products have begun to appear in various contexts, where the demand is sizable in both aspects of educator's needs and parenting needs. To further explore the capacity of edutainment content, this article divides popular edutainment products into several categories based on different application scenarios and targeted audience groups, including school systems, free markets and the public sphere.

In relevant cases, the major advantage of edutainment products can be concluded to be the immersive and interactive experience, which is achieved by role-modelling and role-playing strategies. The article aims to form a scientific model of edutainment products by analysing the pattern of consumption in related products and comparing it to conventional measures in the education process. This model would accordingly be used to evaluate the potential of improving the efficiency of edutainment contents, therefore reinforcing the positive effect in recreational activities.

2. Edutainment in the Schooling Context

In the landscape of the school teaching environment, edutainment products began to act as supplements or even replacements for common education tools, including reference books and multimedia courseware. As mentioned earlier in this paper, the concept of enter-educate drama has been systematically introduced into classrooms in Western countries for a long time [6]. Drama lesson in junior grades turns the classroom into a stage space; however, it is not so much about the academic area of theatre and drama but providing an appropriate environment for role play, chase play activities and problem-solving experiments in order to discover the ability of exploration and self-expression, while developing the process of self-cognition [7].

The educational content and methods related to the drama enlightenment approach were once neglected in the Chinese education environment. However, in the past two decades, the situation has been transformed significantly, as the focus of education has gradually shifted from utilitarian purposes and unified standards to an in-depth development of well-rounded, quality-oriented education. As the time and quality of entertainment for children are considered essential for their health and growth [8], schools and educators are not allowed to give written assignments to junior-grade students. Both the teaching process and learning outcomes are highly dependent upon entertainment materials and activities; as a consequence, extracurricular learning and extended reading products are increasingly valued.

In the context of the Chinese standard education system(also known as the 9-year compulsory education), each grade of student is informed with different reading lists, depending on students' comprehensive ability and phased teaching purposes designated by the syllabus. The reading materials in the lists are in various subjects, genres and formats and are categorized as compulsory and optional [9]. As the optional readings do not occupy a major proportion in exams as compulsory materials, they are naturally applicable to be integrated into edutainment content. While the compulsory reading materials are inserted in textbooks and form the main body of the exam syllabus, relevant edutainment products are still in need due to the universal contradictions and difficulties in the conventional school teaching process. Firstly, students from all age groups face the same difficulty in memorizing the detailed knowledge and answer strategies in response to the exam criteria. In that case, simulating an entertaining, subconscious setting would be helpful to improve the efficiency of studying.

Secondly, the lack of critical thinking ability appears to be an issue due to the unified schooling method, especially in senior grades [10]. As the pressure from exams begins to increase, students are likely to be trapped in the rote learning mechanism in order to adapt to the exam-oriented teaching style while losing the opportunity to develop a spontaneous understanding of the contents. Thirdly, the monotonous learning process could harm students' self-motivation. Therefore, it is hard for them to discover and develop their own interest and advantage in specific fields of study. As suggested by Hobson in his study of dreams, he points out that boredom in learning is inevitable, while dreams function as a subconscious learning environment where people are not aware of the process of learning [11].

In order to minimize the negative effects brought by the problems mentioned above, supplementary edutainment products are designed in the following subjects/areas of learning:

2.1. English Language Education:

Among all other subjects of education, language learning has been reckoned to be the most effectively and directly benefited from the application of immersive experience, accordingly, the edutainment products. In the 21st century China, it has been attracting researchers' attention to why and how learning a second language by simulating the native language learning process is more effective than the traditional teaching style [12]. The conventional language education in 20th-century China was once entirely theoretical, where rigidly memorizing grammar and vocabulary was the main teaching strategy. As the globalization process promoted the merger and collision in worldwide cultures, the close communications between countries allowed people to build a deeper understanding of foreign languages. This provided favorable conditions for native-style learning in the practice of foreign language education [13]. In addition, parents' willingness to employ native speakers for tutoring and to consume abroad study tours for children have demonstrated their approval of the immersive approach to English learning; in that sense, edutainment products have become a more diversified and economical choice for the general audience [14-16].

In the case of Chinese learning, a program called "The Rensselaer Mandarin Project" was conducted by researchers from Rensselaer Polytechnic Institute. The researchers believe that AI tech and hyper-immersive technology are helpful in constructing native environmental conditions for second language learners not just to get used to the language itself but also to gain cultural immersion in order to thoroughly understand the language system. The program aims to simulate an immersive Chinese daily living environment by employing VR technology and an interactive game engine. According to the project report, this "teaching process" is more precisely a self-motivated gaming experience, which happens in a black-box theatre instead of an ordinary classroom [17]. The learning experience is based on a game-like exploration supported by motion sensors and spatial-audio speakers, which turns the physical space into a CIR (cognitive immersive room) space. For instance, a chapter the project has come across was the conversational practice and vocabulary learning in the restaurant scenario. Users are free to move in in the 360-degree virtual-reality Chinese restaurant setting; they can walk around the surrounding areas like the kitchen, boots, and receptions. Whenever they see unfamiliar items, they can pick them up and get annotations about vocabulary and relevant information on the side. In addition, virtual characters are designed in each scenario for users to have conversations with. This is achieved by the involvement of AI agents, while the characters' conversations and activities appear to be realistic and stochastic, which reinforces the immersion of experience.

According to the report, after the completion of the project, the experience feedback is overall positive, and the expected effect has been achieved [17]. Under the premise of assuring the effect of native-style immersive learning of language, the project solves the mobility barrier of cross-border entry into a new language environment to achieve expected learning results. It provides a more

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convenient, practical and affordable alternative compared to long-distance field travel and long-term living in an unfamiliar environment. Although such projects can be realized in higher education institutions, it is still difficult to apply a similar approach to the daily teaching for younger students. Especially in the context of China's compulsory education, problems such as a large number of student bases, high equipment costs, and difficulty for teachers to manage uniformly in the classroom environment make it difficult for similar projects to be popularized in elementary or middle school campuses. However, even when being outside of a proper teaching scenario like classrooms, a relevant approach has also been adopted in the family education environment. While it has been hard to forbid children from spending more and more time on electronic devices and games, instead of causing direct conflict with kids, some parents have found a method of compromise, which is to switch the game's language system to English. In this case, as The Rensselaer Mandarin Project has experimented, similar programs are suitable for students to be taken as supplementary materials.

2.2. Literature Derivative Content:

In terms of classic literature, fundamental education has taken that into account in both the Eastern and Western worlds. In the British GCSE level syllabus, the introduction of Shakespeare texts, including the four great tragedies (Hamlet, King Lear, Macbeth, Othello) are always on the compulsory list [18], while in Chinese middle schools, classical literary works, including the four masterpieces, which are Journey to the West, Dream of the Red Chamber, The Water Margin and Romance of Three Kingdoms. Some Chinese researchers' studies have examined that being exposed to classic literature is helpful in developing students' logical and critical thinking skills while broadening their insights into history, civilization and many other areas of knowledge [19,20]. For the reasons mentioned above, these literary classics frequently appear in the classroom teaching of primary and secondary schools and become an important part of the examination structure. However, since literary works, especially classical literature, are often long pieces with intricate writing styles, students tend to choose film and television adaptations as substitutes, as the experience would be easier and more digestible than reading the original texts.

It is concerned by the experts that student in the information age would gradually lose their reading habits. In that sense, while TV and film adaptations are also seen as edutainment content in terms of introducing the literature, other forms of activities that can stimulate students' motivation to read are regarded as better supplements to learning. Content creators have found the redeeming features demonstrated in entertainment activities like murder mystery games that the significance of role-play and interactive information-sharing processes are conducive to the understanding of certain materials. It is suggested in studies that the concept of play is considered functional in an organizational domain, unlike the executive domain, which maintains essential survival instinct, the pedagogy function of play is to provide opportunities for experiment and training during the nurturing process with low cost of risk and other forms of expenditure [5]. Similar to the function of dreams, play helps to gain information and experiences with no conscious intention to learn. In that sense, many organizations and publishing enterprises began to make attempts to merge the form of mystery games with educational content. The immersive reading game Dream of the Red Chamber is a newly released example of such attempts and has been experimented with in Shanghai Library and a few public middle schools.

The game Dream of the Red Chamber is co-presented by Shanghai Library and an immersive & interactive content-focused label, Immersive Factory. The original text of DRC is a realistic novel created in the Qing Dynasty. In addition to the detailed description of the social structure, historical livelihood and the emotional entanglements of the characters, the book also contains deep exploration into philosophical reflection, political irony and inquiries of human nature [21]. On the contrary, Journey to the West, which is also one of the four great novels that carries profound connotation and

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a serious spiritual core, is, however, more easily accepted by young audiences as it is a romanticism magic novel built by adventurous plots and fantasized magnificence. Furthermore, although institutions set educational and test-taking requirements for the content of DRC for young students and expect them to develop an integral understanding in general, there are many specific details that are not suitable for children to study closely due to the realistic nature of the text, including pessimistic value, conspiratorial plots and erotic descriptions [22,23].

For the above considerations, the reading game filters and refactors the story threads into the form of scripts in order to present a simpler structure while extracting the key chapters and avoiding inappropriate details. The fundamental mode of the game is based on role-play experience and management simulation games. Research has suggested that a pretense is a form of hypothetical reasoning where the performative behavior served in role-play develops the process of self-construction and more sophisticated exploration of peers' internal states by speculating their gestures and reactions [5]. The complete experience of the reading game project is supported by main props, including 6-character scripts and a game board. Each game accommodates 6 participants, each of them playing one of the 6 characters selected from the original text. As playing different roles in the story, each participant is given a different script, which naturally creates information gaps between them. Therefore, participants are forced to thoroughly read the content, efficiently digest the information and share their aspects of the story with other players. While the reading game product is derived from the mode of murder mystery games, phased tasks and mystery solving are important strategies that give opportunities for interactive activities, which maintains players' initiative and concentration in texts. The whole game is divided into 6 key stages, and each stage conveys an important event in the original text that is reconstructed with a puzzle to solve.

For instance, the 3rd chapter of the game "The Venison Feast In Snow", which is adapted from an iconic scene in the DRC novel, recreates a theft case mentioned in the original text. While the game is designed with various forms of activities for each chapter, the task set for this scene was to analyze the suspects' testimonies in order to find out the truth of the theft incident, therefore introducing the participants to get involved in the story context and comprehend the event with a full-scale view. At the same time, the 6 parts of the game are arranged chronologically and are connected with the simulation game. Similar to Monopoly and flying chess, players are represented by indicative signs on the board while the game board demonstrates a map with checks, yet in this game, each check stands for cases, events or important time spots instead of locations. During the board game section, players can reach more comprehensive contents that are not included in the script part of the game, while the dealing rules reward mechanism are set around knowledge tests and quizzes. On the other hand, a single round of the board game stands for a year of time in the background story; the game then goes back to the script section at the end of each round of the board section, which creates a rhyme in-game that signifies time lapses and plot progression.

While reviewing the case of the DRC immersive reading project, three main issues that have been found difficult or unsolved during the creation and operation process are: 1. The space for recomposes in the adaptation works is obscure. While it is a new form of attempt for edutainment products to get involved in formal educational/cultural organizations, the adaptation process is without a unified standard; that is to say, more studies are needed in order to conclude a scientific methodology as guidance. 2. The profit model of such a project is not yet clear. As the production party and organization are in a commission relationship, the operation of projects is now in the mode of public organizational activity, while the method of transferring such products into the free market still needs more exploration. 3. As the project aims to cover a wide school-age audience group, the participants' levels of knowledge and comprehension of the original text are different; in that case, ensuring a unified experience in the game is yet to be improved.

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3. Reflection and Suggestions

The above section of the study assessed edutainment content in school teaching contexts where the targeted audiences are mainly under-aged groups to college students; the educational purposes are therefore prioritized before entertainment means in such products. This nature of contents causes a strict limitation in consumption and market size. Different from other types of content products, the target audience of edutainment products within the teaching system is relatively complex; that is to say, the design of such products is faced with contradictory needs from a quadrilateral relationship between official educational institutions, educators, parents and students. The consumers and users of the product are not unified, as young students are the main users of such content, yet they are not the actual consumers, whereas parents and educators are the real consumption power of the demand object. Content creators as providers of educational material, the tasks and indicators issued by official educational institutions are the standards that such content products must refer to; as an entertainment product provider, students' interests and response to the content directly affect the succession of such products. While teenager's evaluation is eventually based on the level of recreational use, educators would only evaluate the product by its effect on learning. Therefore, while meeting the teaching standards of authoritative institutions, balancing parents' expectations for the test-taking function and students' requirements for entertainment has always been a core topic that such products sustainably need to solve.

In the latest trend of public cultural products, edutainment contents are applying to a far more extensive and flexible context outside of the school teaching environment. As facing a more general audience, these edutainment products are designed with different focuses compared to the ones in teaching scenarios. At the same time, while the audience majority are the crowd without professional insights or test-taking needs, entertainment purposes usually weigh more than education purposes in the public sphere enter-educate contents. At the beginning of the 21st century, although authorities have attached great attention to the field of public culture and education, its form of communication was relatively simple. CCTV has produced various series of TV programs such as The Lecture Room (Bai Jia Jiang Tan), Discovery (Tan Suo Fa Xian) and Approaching Science (Zou Jin Ke Xue), which are designed for different subject areas, including literature, geography, history, archeology and folk cultures. The series was once extremely successful in popularizing knowledge to a wide audience. However, the programs' formats are no longer new to the audience after a few years time. Therefore, the entertainment value to the audience was decreased while the educational content itself began to lose its attraction and acceptability. Hence, the programs have to make adjustments to please the public, even with claptrap content, which leads to a significant decline in quality.

In that sense, developing the varieties and possibilities of contents and forms in the subject of edutainment becomes an issue of debate. Taking the category of murder mystery games as an example, it was once purely designed for entertainment purposes, which carries strong socialization properties, yet is becoming a new carrier of cultural pedagogy. The games Red Been and A Letter Home are two popular works in recent years; both convey patriotism values and are created based on real historical events related to the founding of the nation. The Empire of Cash is another game that has been bestowed with educational means and has been opted for the course activity of EMBA China Europe International Business School. As it is a business-themed strategy game, it simulates a commercial confrontation in the context of a fictional narrative, where players are provided with the experience of cooperative live operational training.

4. Conclusions

This paper makes a general analysis of popular edutainment content from an updated perspective by assessing a selection of representative cases in the aspects of societal background, creation motive,

user portrait and communication strategy. With the development of the information age, the channels for content transmission have become increasingly diversified. Accordingly, the gap between entertainment media and educational content is gradually disappearing. Programs including films and tv, tourism products, board games, murder mystery games, cultural creative products and other amusement activities aim to entertain the audience while achieving pedagogical purposes in the areas of (1) knowledge popularization programs, (2) national spirit and patriotism propaganda and (3) site-specific cultural heritage promotion, historical education and local culture publicity in the tourist economy. At the same time, edutainment products have gradually transformed from the public welfare and non-profit-based communication form to a non-public welfare market-oriented behavior in the current environment.

Due to space and time limitations, the main research object of this paper focuses on the content disseminator rather than the audience. As a result, the subsequent response and effect in relevant cases have not yet been explored in detail. In future studies, direct audience feedback can be obtained through surveys, while data analysis can be used to conduct specific quantitative research on the communication efficiency of edutainment contents, as well as the economic performance of products, such as input-output ratios.

To sum up, the creation and promotion of edutainment products often face problems caused by inconsistencies in core appeals. Among products in the teaching environment, the conflicting parties are mainly composed of entertainment value and teaching results, Whereas in public sphere, the revenue expectations could be in opposition to the pedagogy targets. However, these contradictions are not irreconcilable, while more time and experimentation are required for a solution. After summarizing a model that can be relied upon, the dissemination efficiency of entertainment and educational content will then be significantly improved.

References

[1] *Gerbner, G. (2017). Cultivation analysis: An overview. Refining Milestone Mass Communications Theories for the 21st Century, 16-35.*

[2] *Gentile, D. A., & Anderson, C. A. (2006). Violent video games: Effects on youth and public policy implications. Handbook of children, culture, and violence, 225-246.*

[3] *DeLisi, M., Vaughn, M. G., Gentile, D. A., Anderson, C. A., & Shook, J. J. (2013). Violent video games, delinquency, and youth violence: New evidence. Youth Violence and Juvenile Justice, 11(2), 132-142.*

[4] *Brown, William J. (2017). Entertainment-Education. obo in Communication. doi: 10.1093/obo/9780199756841-0180*

[5] *Steen, F., & Owens, S. (2001). Evolution's pedagogy: An adaptationist model of pretense and entertainment. Journal of Cognition and Culture, 1(4), 289-321.*

[6] *Wagner, B. J. (2002). Understanding drama-based education. Journal (Israel), 52, 53-57.*

[7] *Stanton, K., Cawthon, S., & Dawson, K. (2018). Self-efficacy, teacher concerns, and levels of implementation among teachers participating in drama-based instruction professional development. Teacher Development, 22(1), 51-77.*

[8] *Qin, Y., & Qi, W. (2022). Basic Consensus and Development trends of Burden Reduction Policies for Primary and Secondary Schools in China. Education and Economy, 38(1), 3-10.*

[9] *Li, Y. (2017). A Brief Discussion on the Reading Strategies of the Whole Book - Taking the Required Reading List of the New Primary School Chinese Curriculum as an Example. Elementary Education Research: Theoretical Edition (10), 3.*

[10] *Song, N., Song, G., She, X., & Zhang, B. (2000). Research on the Relationship Between Reading Motivation, Reading Time and Reading Results of Middle School Students. Psychological Science(1), 84-87.*

[11] *Hobson, J. A., & Friston, K. J. (2012). Waking and dreaming consciousness: neurobiological and functional considerations. Progress in neurobiology, 98(1), 82-98.*

[12] *Bhela, B. (1999). Native language interference in learning a second language: Exploratory case studies of native language interference with target language usage.*

[13] *Hein, R. M., Wienrich, C., & Latoschik, M. E. (2021). A systematic review of foreign language learning with immersive technologies (2001-2020). AIMS Electronics and Electrical Engineering, 5(2).*

[14] *Zhang, Y. (2013). A Brief Discussion on Native Language Learning of English. Primary School Students: Teaching Practice.*
[15] *Chen, H. (2013). A Sight at the Balance Between "Form-Focused" and "Content-Based" Teaching from Early Immersion Chinese Teaching in the United States. (Doctoral dissertation, Southeast University).*
[16] *Lu, X. (2015). The Enlightenment of Immersive Language Learning Method on the Reform of College English Teaching. Guangxi Education (11), 2.*
[17] *Allen, D., Divekar, R. R., Drozdal, J., Balagyozyan, L., Zheng, S., Song, Z., ... & Su, H. (2019, July). The Rensselaer Mandarin Project—A cognitive and immersive language learning environment. In Proceedings of the AAAI Conference on Artificial Intelligence (Vol. 33, No. 01, pp. 9845-9846).*
[18] *Elliott, V., & Olive, S. (2021). Secondary Shakespeare in the UK: what gets taught and why?. English in Education, 55(2), 102-115.*
[19] *Xie, H. (2009). Building a Bridge between Text Interpretation and Reading of Classical Masterpieces. Elementary Literature Teaching (3), 2.*
[20] *Zhang, Z. (2020). Reading the Whole Book: An Incubator for the Development of Critical Thinking—Taking the Introduction of the Four Classics as an Example. Teaching Materials for Primary and Secondary schools(6), 4.*
[21] *Zhou, J. (2019). A Brief Analysis of Children's Education and its Practical Significance in "Dream of the Red Chamber". Northern Literature (14), 2.*
[22] *Liu, H. (1987). The Illusory Shell of Realist Pictures - A Brief Exploration of the Romantic Artistic Techniques of "Dream of the Red Chamber". Journal of Dream of the Red Chamber (3), 16.*
[23] *Lv, Y. (2016). About the Strategies: The Four Classics are Applicable for Children's Literary Education. Educational Literature (22), 2.*