History Education Game and English Language Learning --Taking Today in History as an Example

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Abstract: **Based on the current situation of English education in China, this paper explores the positive effects of combining English and history educational games, so as to improve students' overall quality and motivation to learn, and develop their intercultural communication skills, creative awareness and independent learning ability. The quantitative research approach is applied in this study. A survey is carried out and it is found that most people learn English and history through teacher-led lessons, short videos and instant messaging software, and are willing to try a game that combines English and History. Based on this, an attempt is made to introduce a history-based educational game--*Today in History*--with English as the main language.**

Keywords: **Educational Games; English Learning; Historical Knowledge**

I. EDUCATIONAL GAMES

1.1 History of Educational Games

Since their introduction in 1952, video games have become the most popular form of entertainment, and if they can be integrated with education, it may be possible to achieve entertainment. As a result of this, scholars began to study the educational value of video games (Bo, 2021).

In developed countries, educational games have a very strong theoretical support (Huang, 2022). Daphne Bavelier, a professor at the University of Rochester in the USA, has demonstrated the educational value of video games in practice (Li, 2020). Quest Atlantis, designed and developed by Professor Sasha Barab, is a typical example of the integration of disciplinary learning based on games. It proved that building a game-based learning environment can help students to improve their academic performance and interest. In addition, the River City project at Harvard University, the Game-to-Teach project at MIT, and the EduVenture project at the Chinese University of Hong Kong have all demonstrated the feasibility of teaching and learning based on video games (Sun, 2021).

After the theoretical foundations were first modelled, the first educational games were created in the late 1980s and 1990s by Broderbund, The Learning Company, The Minnesota Educational Computing Consortium, and many others. These games had an indelible impact on the generation of that time (Liu, 2020).

Deepening and Upgrading Stage

Although there are few theoretical studies on educational games in China, many practices of electronic educational games have gradually emerged in China since the post-21st century. Some of these educational games are used to complement classroom teaching in the schools, using puzzle games to help students understand abstract knowledge and acquire skills. For example, Nantianmen company developed a gamified English learning product called "Dreamland Study Tour". There are also a significant number of educational games used to publicize popular knowledge and to improve the scientific literacy of the general public. For example, the "Firefighting Game" is based on a game engine with firefighting knowledge as its main content. In addition, the realistic pictures, real immersion and fictional storylines of educational games also provide trainees in many professional fields with a context for learning and special skills training such as the role-playing game "Clinical Nursing Practice" (Zhao, 2020).

1.2. The Advantages of Educational Games

1.2.1 Definition and Classification of Educational Games

As a combination of education and games, educational games have both the educational and rule-based nature of education and the entertaining and participatory characteristics of game. In general, educational games are divided into different groups and have different forms of expression. When it comes to game derivation relationships and major game portals, educational games can be divided into: (1) role-playing; (2) action; (3) strategy; and (4) simulation (Liu, 2020).

1.2.2 The Positive Impact of Educational Games on Learning

First of all, educational games create vivid scenes, rich animations, delicate movements and beautiful background music, which increase the fun of learning. What's more, the game is interactive, children can keep a high interest without realizing it, and children can be able to acquire knowledge and skills to learn a lot happily, easily and effectively (Zhao, 2020).

Secondly, the educational games planned by educational experts are more targeted. They contain both scientific and reasonable information and meet the psychological and cognitive characteristics of the game objects, which can help

learners learn to do things in their daily life, learn to find problems, analyze problems cooperatively and solve problems independently (Zhao, 2020).

Thirdly, games are innovative and varied which can provide learners with rich experiences. Games can provide diverse ways of learning, such as role-playing and level-breaking. Moreover, the immersion of stories can trigger learners' sense of mission and make them more engaged. These processes for solving problems and overcoming challenges allow learners to learn independently, while repeated practice and strategy adjustment allow learners to engage in higher-level thinking and learning (Zuo & Duan, 2021).

Fourthly, fully respect children's desire for exploration. From the perspective of children's psychology, children are curious about the world and they are eager to explore new things. Games are full of fun and challenges that can fully stimulate children's curiosity, so that children learn to explore actively, rather than learn passively (Shao, 2020).

Fifthly, educational games can be based on local culture and integrate local educational views and values. Childhood is an important stage in the formation of values in life, and it is the responsibility of the whole society as well as the obligation of practitioners and researchers of ideological and political education to help young people establish scientific values. Games can expose children to the local culture and help form correct values in an interesting and easy-to-understand way (Zuo & Duan, 2021).

1.2.3 Current Situation of Educational Games

Although many institutions and enterprises at home and abroad have invested a lot of human and material resources in the development of educational games, the results in practice are not satisfactory and there are still many shortcomings in the existing educational games on the market. For example, the popularization of educational games is not very comprehensive in medium development cities; there are still some gaps in the industrial business model, development concept and construction, and we still need to learn from the valuable experience of other countries (Yang & Wang & Jiang, 2022). The main difference between educational games and normal games is strong educational, i.e. learning content, moral quality, skill development, etc.(Wu & Zhu, 2022). The problems of the existing educational games on the market are as follows：

Firstly, there is an imbalance between the educational and entertainment components of educational games (Mo & Kuang, 2019). Many educational games on the market incorporate educational content directly into the game, and players are required to answer questions to play the game as a reward. This is an overly educational approach, which does not only fail to realise the concept of learning through playing and playing while learning, but may also make educational games, which should be fun, less interesting.

Secondly, there is a lack of variety in the types of educational games. Most of the educational games on the market are based on the subjects of Mathematics and English, with dull content and even fewer applications that link subjects to each other. The plots of the games are outdated and some of them lack a sense of design and logic (Zhao, 2020).

Thirdly, the game management mechanism is not developed. The ultimate goal of educational games is to enhance students' learning, but many APPs that promote learning while playing in the guise of educational games are only advertisements launched to increase the number of downloads, but in fact the learning content is too brief and not beneficial to students' learning development (Zhao, 2020).

Fourthly, the training of game talents for educational games lacks systematization and coherence. Many people consider educational games as an accessory to online games, thus blurring the boundary between educational games and online games. In terms of cultivating talents, the faculty resources are relatively weak and the control of the target students is not strict enough, which make this industry lose talents for development (Zuo & Duan, 2021).

In general, with the development of information technology, the development prospect of educational games is increasingly open. According to a survey of school teachers conducted by the Marketing Research Office of China Distance Education magazine, 41% of teachers thought that schools would accept the use of educational games in schools, while another 26% were undecided (Mo & Kuang, 2019), indicating that educational games are popular with educators. Currently there are few educational games available in the domestic market, but there are a number of companies that see the potential for educational games to be developed. The games that have been developed are divided into single-player and community games, and are more focused on single-subject teaching, with very little teaching of joint subjects and moral and emotional teaching.

II. ENGLISH LEARNING IN CHINA

2.1 Students' Motivation for Learning

In the context of language learning, instrumental motivation is actually the desire to gain knowledge of the language and acquire new language learning skills in order to gain the consensus of others, emotional empathy and tangible material rewards. Integrative motivation, on the other hand, is the desire to become part of a group of people who also speak the target language through language learning (Sun, Wang, Gu, Li, & Ge, 2021).

After collating the data from the survey made by the researchers of this study, it is found that most students are motivated by instrumental motivation: the need to achieve the

standard of the school curriculum; the need for English-related certificates for their target institutions and desired positions; and personal interest. However, in the context of language learning, instrumental motivation has certain limitations and does not maximize students' motivation. A single motivation may also lead to changes in students' attitudes to learning at a later stage.

2.2 Students' Independent Learning Ability

On the one hand, students' autonomy needs to be improved. Lacking the support of a good language environment, English language learners need more guidance in terms of interest and more correct teaching methods to internalize the language. This requires students to actively experiment with and take control of their learning plans, learning objectives, learning content, learning methods and learning materials. On the other hand, learning materials are under low utilization. At the basic education level, students mostly make use of textbooks and reference books (Wu & Zhu, 2022). At the higher education level, students' reference materials tend to focus more on knowledge-intensive teaching aids, and the average time spent on studying is repeatedly compressed, ignoring the fact that English learning requires daily accumulation and consolidation.

2.3 Imbalance in the Language Ability Training

At primary and secondary schools, students focus on reading and writing skills because they have high scores in the exams. At universities, students still put emphasis on reading and writing because of the far-reaching influence of traditional learning concepts, and this is particularly evident in CET-4 and CET-6. In school, teachers are riveted on teaching writing skills in a systematic and profound way, with an emphasis on building students' logical thinking systems and creative writing skills. However, too much emphasis on the development and enhancement of writing skills can lead to the illusion that students only need to construct a logical framework to learn English well (Wu & Zhu, 2022).

2.4 Students' subjectivity

At the basic education level, the dominant role of the teacher is overemphasized in schools, with teachers giving knowledge-based lessons, mostly in their mother tongue, emphasizing the importance of templates and practice. The subjectivity of students as learners of English is ignored. In contrast, at the tertiary level, students' sense of subjectivity refers to highlighting the primary role of students in the class, with teachers guiding students in their learning of knowledge. In class, teachers should give students more opportunities to present their ideas, encourage them to use English to express their views and train their critical thinking in order to achieve teaching effectiveness (Huang, 2022). However, most of the current non-English major English classes still lack or misuse students' sense of subjectivity.

2.5 Digital Teaching Media and English Learning

In this new era, the introduction of digital technology, the upgrading of teaching media equipment and the updating of learning tools have laid a solid foundation for an interactive teaching concept and provided strong conditions for a seminar classroom. For primary and secondary school students, the question of how to develop the correct habits of learning English through the use of digital means, how to build a solid foundation of knowledge in the formative years, and how to pave the way for higher education and independent learning later in life, ensuring interest in learning English and developing diverse learning methods, has become a new era of learning.

As for universities, in addition to the need to encourage university teachers to develop integrated knowledge-based processes, mainly in the form of digital resources, to guide students to learn English purposefully and consciously in conjunction with their interests, students also need to take the initiative to explore the diverse learning styles available in digital resources (Gong, & Zeng, 2021).

III. THE POSITIVE EFFECTS OF HISTORY LEARNING ON ENGLISH LANGUAGE LEARNING

3.1 Intercultural Communication

There are big differences between Chinese and Western cultures. The Chinese character for dragon, for example, has been given a beautiful meaning by our ancient ancestors, and Chinese people often use idioms with the word dragon to describe things with good qualities in their lives. In Western countries, however, the dragon represents evil and sin. With China's rising international status and its fundamental policies of "Opening-up policy" and "the Belt and Road Initiatives", China's international exchanges are becoming more and more frequent (Bo, 2021). The need for students to improve their cultural communication skills is becoming more apparent as people will be interacting and working with international friends from all over the world, which means that Chinese people will be faced with the problem of overcoming language difficulties and communication barriers caused by cultural differences. Language is the carrier of a country's history and culture, and plays a vital role in the recording, preservation and transmission of that history. Learning a country's language involves understanding and studying a country's culture. Therefore, learners should learn English with the aim of understanding the cultural background and cultural history, so as to acquire English knowledge and skills, enhance cultural self-confidence in cultural encounters between countries, and lay a good foundation for intercultural communication (Chen, 2021).

3.2 Overall Development of Students

History is a mirror that records the wealth of experience accumulated over the course of human history, allowing us to identify what is more important and teaching us the ability to

distinguish between right and wrong (Bo, 2021). Studying history enhances our understanding of the culture of the target language country, broadens our horizons, increases our insight and establishes a scientific world view. The new English curriculum standards for secondary schools clearly state the educational objectives of language teaching in the English curriculum - to develop students' ability to use English knowledge comprehensively as the basis of teaching, to highlight the social and cultural attributes of English teaching, to develop English students' ideological and moral qualities and their own social communicative adaptability, and to improve the overall quality of English learners (Bo, 2021). Similarly, as English learners, in addition to developing basic listening, speaking, reading and writing skills, we should also focus on the ability to understand and flexibly apply English knowledge, and improve humanistic qualities in the process of acquiring English.

3.3 Bridging the Gap in School Materials

According to the survey, the higher the English level of English learners, the higher the demand for English textbooks, which need to provide diversified materials (Chen, 2021). The questionnaire survey shows that university students' dissatisfaction with the arrangement of the listening, speaking, reading, writing and viewing content of English learning in school is more widespread, with 49.3% of students who think that they are not interested; with 35.3% of students who think that does not meet their learning needs (Sun, Wang, Gu, Li, & Ge, 2021). School textbooks are one of the main ways in which students learn English, but they are very limited in length and their content focuses on developing students' test-taking skills, with little cultural knowledge. History, as a carrier of the culture, can give learners the background of that culture and is the root of it. Therefore, learning history after class can be a good way to fill the cultural needs of learners.

IV. ANALYSIS OF *TODAY IN HISTORY* AS AN EXAMPLE

Based on the research, the researcher launched a history-based educational game - *Today in History* - and analyzed its feasibility and effectiveness.

4.1 Brief Introduction of the APP

The physical and mental development of learners is the premise of educational game design. For learners with higher school age (over 12 years old), game design should mainly give play to the value of game thinking, not necessarily apply typical games, but pay attention to the core elements of games, and strive to make learning more interesting. In the whole process, the students' game spirit is imperceptibly cultivated, so that they can learn some content that may seem boring with interest and dedication. *Today in History* is an educational game that combines history and English in a subtle way, striving to make learning more interesting. It focuses on the integration of educational content and game form. The result of integration is not the accumulation of

quantity, but the change of quality. At the same time, it realizes the learning of knowledge in the game. This educational APP is designed for learners aged 12 and above. With teaching design as its starting point, layered game design as the core and historical stories as the centre, it aims to achieve a balance between educational science and gaming, so as to create a good experience for learners, and to stimulate their learning motivation, and thus enhance their learning efficiency. At the same time, the difficulty of the activities is dynamically regulated to allow players of all levels to become immersed in the game. The game design continues to stimulate the psychological needs of the players, blending game and knowledge in a reasonable way while maintaining the depth and balance of the game.

4.2 Game Design

Cognitive theorists suggest that declarative knowledge is the most difficult to receive, remember and retain, but that learning can be more effective with less effort if it is directly experienced (Huang, 2022). *Today in History* proposes to adopt the popular contemporary 3D technology and adopt a mixed mode of Chinese and English, mainly launching Time-Space game board, 3D museum board and Forum board.

4.2.1 Time-Space Game Board

In the Time-Space section, learners can choose a point in time they want to reach on a timeline and history map that encompasses both ancient and modern times, and participate in historical events, such as going to the Spring and Autumn Warring States to experience the War of he Lords, or the Tang Dynasty to see the reform of the sons, or the Roman lands to experience Napoleon's East campaign, and the Red Revolution in Bastille, France, to experience the event or even choose to be a major character in the historical event. Users can choose to become a major figure in history, find clues in the game's story, unlock goals, follow instructions to enter the story of the historical figure and complete the tasks in the story. The intuitive sense of immersion not only helps learners to get to know the main historical figures and understand the historical context, but also to develop a strong interest in history and increase their knowledge (Bo, 2021). Users can also choose to become secondary characters in a historical story, observe historical events in the game story, immerse themselves in a historical situation, and thus make a more objective assessment of that history. Players can even make Better choices by put their own ideas into practice in the game while experiencing historical events and seeing how imagination and reality can collide and to gain a deeper understanding of the inevitability of history.

This game mode, supported by 3D technology and based on a rich culture, strive to help learners reach an understanding of the history and development of the language, learn the culture and language of the target language country in an entertaining way, and enhance language learners' interest in learning in the form of games.

4.2.2 3D Museum Board

The 3D map automatically locates the latitude and longitude of the museum and provides a 360-degree view of the exterior and surrounding buildings of the museum once it is identified (Liu, 2020). Users can control the directions on the phone and enter the museum. The exhibits can be freely enlarged for viewing, and the bilingual information cards next to the exhibits are designed to meet the higher needs of learners.

The 3D museum contains the interior exhibitions of major museums around the world, with high-definition 3D models that not only allow you to view the exhibits, but also provide a clear overview of the exhibits in their original language, with a caring assistant on hand to explain them. The Chinese model, Chinese-English model and English model are available to meet the needs of more advanced English learners.

4.2.3 Forum Board

Learning should have an active and creative output, and the forum board provides an opportunity for learners to practice what they learn. It is a place where not only history experts but also history or language enthusiasts from all fields can ask and receive answers to their questions, but where they can also use their strengths and knowledge to help other learners who are also history enthusiasts. The dual role of student and teacher with the Chinese side will also give learners the incentive to take on more expertise and become more motivated to learn.
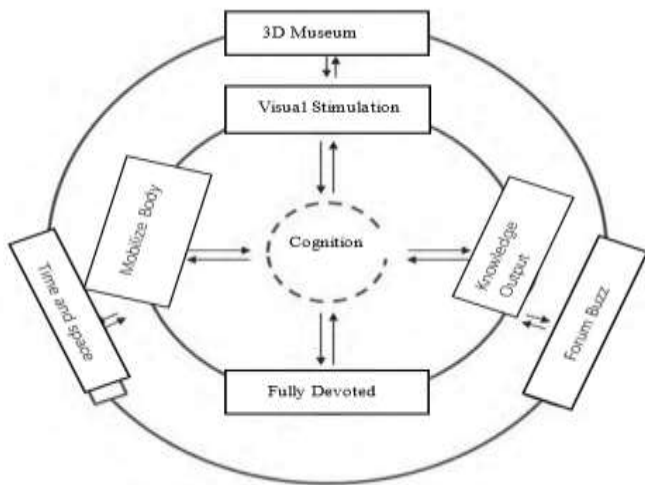
4.3 Findings

Field research was conducted and it was found that whether history-based educational games can have a positive effect on English language learning. In a sample of 100 students, it is found that the majority of students learned about history and English through teacher lectures and short videos or instant messaging software, which are used because they

are more interesting and it is especially important for history learners to avoid learning history in a boring way. The data from the research is shown below.

Options (multiple choice)	Subtotal	Proportion
A. Weibo, Zhihu, official account of Wechat	60	60%
B. History books, English books/textbooks	42	42%
C. Teacher narration during class	61	61%
D. Video softwares such as Beeping	51	51%
E. Not learning, not interested	9	9%
This question is valid for the number of people who filled in the question	100	

After the research, it is found that most learners' biggest problem in learning English and history is that they forget the knowledge points quickly, so a lot of rolling practice is needed, and easily get tired and lose interest in the learning process. And 93% of the respondents are willing to try science software that combines history with English and education with games. The APP *Today in history* offers learners the appropriate solution, with its fun and innovative nature, as well as a strong reserve of mind maps that provide learners with learning tools and promote the exercise of logic in their minds. The data from the research is shown in the graph below.

Options (multiple choice)	Number in total	Proportion
A. Really expect science software that combines history with English and education with games	58	58%
B. Generally expect science software that combines history with English and education with games	35	35%
C. Not really expect science software that combines history with English and education with games	7	7%
the number of people who filled in the question	100	

The research data provides a certain degree of reference for the feasibility of this software, and a history educational game APP developed with care will certainly play an active role in the learning path of history and English learning for the majority of learners.

V. SUMMARY

In summary, the idea of combining English and history is proposed to address the shortcomings of English education in China, and the educational game APP *Today in History* is used as an example to analyze the advantages, effectiveness and feasibility of this idea. From the perspective of students'

general quality, enhancing students' cultural knowledge not only avoids the embarrassment caused by culture-shock, but also enables students to experience different cultural ways of thinking and worldviews. What's more, it cultivates students' tolerance, diversity and open-mindedness. In terms of students' creativity and motivation, the combination of games and education can integrate the learners' perception, memory, emotions and thinking to stimulate interest and enhance learning ability. It also coincides with the concept of New Curriculum Standard, namely, changing the learning from filler and mechanistic learning (Gong, & Zeng, 2021).

At present, there are few English language learning models in education that combine historical and educational games with English. It is therefore an innovative and interesting new model of teaching (Gong, & Zeng, 2021). In addition, learning foreign history can develop students' inner cultural heritage and transform the "subject focus" to a "people focus" in the New Curriculum Standard. The concept breaks down the barriers of traditional English learning and enhances the status of history in language learning. It can merge history with language and innovation with teaching.

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