

Article

Applying War Heritage in the National World War II History Course for College Students in China: An Exploration of Digitization Strategies

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Abstract: Digital media is increasingly being used in formal education. In China, in order to reduce the negative emotions and behaviors of college students in World War Two (WWII) history courses, digitized resources of war heritage are being applied to improve their learning experience. However, their effectiveness remains unconfirmed. Therefore, the purposes of this study are to: (1) test whether the transformation of war heritage into digital resources can help to improve the learning experience of college students; (2) explore the pivotal factors that affect the learning experience of college students; and (3) provide suggestions for improving the digital teaching resources regarding war heritage. The results of the questionnaire survey show that the participants have a positive view of digital teaching resources. In addition, low-interactive digital media can achieve higher learning effects. The multidimensional scaling (MDS) analysis also reveals that creativity in teaching and helping to form students' values regarding cherishing peace are the foci with respect to improving the learning experience. On this basis, suggestions for improving the digital teaching resources regarding WWII heritage are proposed in this study, as follows: (a) to improve the quality of multisensory experiences in digital teaching media regarding war heritage; (b) to reduce the difficulties with human–computer interaction regarding digital teaching media; (c) to strengthen the correlation between digital resources and the teaching aims; and (d) to build a vision for peace and sustainable development through the narrative of digital media.

Keywords: war heritage; World War II history course; digital learning; user experience



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1. Introduction

The practice of applying digital technology to education is being widely discussed around the world. In recent years, higher education has undergone clear changes due to the involvement of digital technology, such as through: virtual reality (VR), augmented reality (AR), MOOC, digital games, the blockchain, and other such technologies that have been introduced into the formal education of colleges through practice, experimentation, simulation, and other related activities [1,2]. The immersive VR system, based on wearable devices, is making breakthroughs in the interactive mode of engagement, which is to further proceed with a view to improving the experience of learners [3]. Through a meta-analysis, Tsai and Tsai [4] found that students preferred digital game-based science learning over traditional teaching; moreover, gamification significantly improved science acquisition for students at all education levels. Therefore, we have reason to believe that the effective utilization of digital technology presents an opportunity to create a more engaging learning experience for college students.

World War Two (WWII) is of great significance in the context of human history. Indeed, many countries and regions have identified the history of WWII as an important part of educating the younger generations [5]. In China, the history of WWII forms part of ideological and political college courses, and it is also a compulsory general course for all

college students. However, the long-term indoctrination teaching model has led to dull and boring classrooms [6], which has reduced students' interest in learning about this particular period of history [7]. In addition, it can even result in producing negative emotions and behaviors, such as irritability, anxiety, rejection, and absenteeism [7–9]. Furthermore, with respect to this, Bunte [10] also found that the low popularity of political science courses is a common phenomenon in colleges across the globe. In order to change this depressing phenomenon, certain scholars from China advocated that the heritage of World War II, such as battlefield sites and other material evidence, should be converted into digital teaching resources and applied to the teaching of WWII history courses [11,12]. However, the studies of Lin et al. [13] and Lazarou [14] advised that although the application of digital technology in mathematics and physics courses has achieved relatively positive evaluation, research into its specific utilization in history courses is quite scarce. Tsai [15] indicated that transforming historical knowledge into digital games may render it difficult to ensure the correctness of historical concepts. Meanwhile, Lazarou [14] cited the basic principles of “Cultural Historical Activity Theory” (CHAT), noting that digital tools should be evaluated and optimized under the systematic context of educational activities, so as to help resolve the tension between students and teaching objectives. Therefore, the purpose of this study is to: (1) test whether transforming WWII heritage into digital resources can help to improve the learning experience of college students via exploring their learning needs and their relation to the teaching objectives; (2) explore the key factors that affect college students' learning experiences when undertaking the national WWII history course; and (3) provide suggestions for improving and developing the digital teaching resources regarding war heritage studies.

2. Literature Review

Vygotsky [16] pioneered CHAT, believing that human activities are composed of subjects and objects, with tools as the medium. It is a process in which people use tools to pursue objects, as well as to transform objects into outcomes [17,18]. Engeström [19] integrated the above three elements with rules, community, and the division of labor. These were then constructed into an “activity system” (AS), in which Engeström believed that the intervention of new technology presented the opportunity to create a new balance within the AS, thereby eliminating internal tensions. According to the above principle, the evaluation of and improvement in teaching tools requires one to fully consider the characteristics and needs of students, as well as the content and requirements with respect to the teaching objectives. Therefore, in this study, a literature review with respect to these three dimensions—i.e., students (subject), educational objectives (object), and digital teaching resources (tool)—was conducted.

2.1. Students' Needs of Digital Learning

According to CHAT, students are defined as the subjects of learning activities. As such, it is necessary to understand the learning habits, strategies, and needs of current college students in order to evaluate and improve educational tools for learning-based reasons. The younger generation of college students are active in their thinking and avant-garde in their behavior, as well as possessing new ideas and thinking that are both emerging continuously [6]. Furthermore, they are often referred to as “digital learners”. Electronic devices—such as computers, tablets, and smartphones [20]—are utilized in conjunction with the internet, social applications, and digital entertainment, which constitute an important part of their daily lives [21,22]. Moreover, digital learning is fast becoming a trend due to its suitability with respect to the habits and needs of college students [22–24]. The following attributes of digital learning are identified as meeting the needs of college students. First, digital learning provides an unrestricted learning experience. Indeed, young people are accustomed to receiving fragmented information [25], and digital learning can free students from temporal and spatial constraints. Second, it can enhance learning interest. Strategies including VR, augmented reality (AR), and gamified learning can increase sen-

sory appeal and create learning situations [26], thereby improving students' participation, concentration [20], autonomy, and increase their positive emotions [9]. Third, digital learning can increase interaction and communication. College students are generally tired of one-way indoctrination teaching; as such, digital learning can facilitate better interactions between students, teachers, and their peers. In addition, the research of Whitton and Langan [27] found that today's college students expect the classroom atmosphere to be relaxed, pleasant, and interesting; moreover, they require teachers to be creative and attractive in their teaching methods, as well as willing to share experiences.

2.2. *The Course of World War II History: Objectives and Pain Points*

In the CHAT model, the educational objective is the object. The ideological and political curriculum program of Chinese colleges and universities requires students to master important historical events, figures, and processes, as well as to understand the national conditions and regulations of historical development. Moreover, through the program's application, students must form the "correct" view of history, war, and national identity [6,7,28], as well as foster a sense of responsibility for building the country [29]. According to Crawford et al. [30], history education in China emphasizes ensuring that students understand the cruelty of WWII, that the valuing of peace and opposition to war is cultivated, and that students are encouraged to discuss the impact of WWII on the past, present, and future, so as to connect history with real life. Numerous studies from outside China have also confirmed the powerful influence of WWII history education on developing the ideology, values, and ideas of the younger generation. This is in addition to the fact that one of the primary goals of Chinese education is to shape a sense of national identity [31–33]. Therefore, the goals of WWII history education can be summarized as follows: (a) to increase the understanding of historical facts and national conditions during the war itself; (b) to form a correct view of history and war in general; (c) to connect with the present and enhance the awareness of social responsibility; and (d) to strengthen the sense of national identity.

In response to the various negative emotions and behaviors shown by college students, Zhu [6] stressed that teaching WWII history to college students should not ignore emotional factors, but should rather be aligned to their cognitive characteristics in order to increase their affinity with the course; furthermore, the teaching should effectively use a variety of media resources in order to increase the attractiveness, creativity, and appeal of the subject. Zhou [12] noted that visiting WWII-related heritage sites or memorials is often considered an extension of the teaching space. However, with the increase in students' visiting experiences, their interest and acceptance of such educational activities appears to be fading. This fact, therefore, indicates that there is a gap between the current teaching methods and the needs of the new generation of college students. As such, there is an urgent need to develop new tools and strategies for WWII history courses in Chinese colleges in order to increase the attractiveness of the courses and to better stimulate students' enthusiasm for learning.

2.3. *War Heritage and Its Digitization*

According to Stone [34], war heritage can be defined as sites and physical evidence where war-related death, suffering, conflict, or atrocities occurred. These can include: battle-field sites, concentration camps, prisons, massacre sites, mass graves, remnants of military equipment, and artifacts [35,36], as well as archives, monuments, and memorials [37–39].

Stone [34] and Biran [40] advised that war heritage often possesses commemorative significance and educational functions. As a tangible historical imprint, war heritage can entail visitors to intuitively experience the environment and cruelty of war [28]. In addition, its associated stories can often engender a strong emotional appeal [12]. Staats [41] argued that physical relics and artefacts can connect people with the past, thereby increasing student engagement through ameliorating the dull, repetitive, and textbook-oriented situation of history classes by presenting an engaging educational alternative. Consequently,

war heritage is becoming a theme of many college courses around the world, thus providing additional teaching materials with respect to formal college education [42]. China, along with many other countries and regions, has adopted wartime architecture, relics, and war heritage in order to shape the younger generations' national identity [43–46]. In sum, the rationale for applying war heritage to education lies in its ability to provide audiences with a sense of historical authenticity, human–historical interaction and connection, as well as to enhance emotional attraction and learning participation.

The International Council of Museums (ICOM) advocates the use of digital technology in order to endow cultural heritage with new narratives and communication methods. Such digital technology includes films, TV series, microvideos, animations, comics, AR, VR, digital games [47], interactive performances [48], and cloud exhibition halls [11]. Indeed, Dal Falco and Vassos [49] noted that visitors' interest in interacting with cultural relics is increasing; furthermore, the combination of digital technology and cultural relics produces a vivid narrative that enhances the experience of knowledge and information dissemination. Furthermore, Not et al. [50] argued that the introduction of digital technology into cultural relics, in order to achieve a combination of touch and interpretation, can help stimulate visitors' empathy for historical figures. Moreover, Challenor and Ma [51] found that the combination of AR and war sites not only increased students' curiosity, learning autonomy, collaboration, and interaction, but also fostered their sense of immersion through engaging in deeply touching storytelling experiences. This suggests that effectively digitizing war heritage can result in a strong emotional impact, thus helping to preserve long-term memories of war. In summary, the rationality of applying war heritage to education lies in its quality to provide audiences with a sense of historical authenticity, to better enhance the interaction and connection between people and history, as well as to help improve emotional attraction and learning engagement. The combination of digital technology and war heritage can produce the opportunity to create a more engaging sensory and emotional experience, thus easing the tension between college students' engagement with respect to learning and WWII history courses.

2.4. Literature Summary

2.4.1. Classification of Media

Ren [48] divided the media regarding the display and dissemination of cultural heritage into two categories—traditional and new media. In addition, Ren further subdivided those categories into factual and fictional types, which were identified according to the narrative techniques used in order to emphasize the positive impact of storytelling on knowledge dissemination and visiting experiences. Based on this, in this study, the communication media mentioned by such scholars as: Kobiałka [36]; Kužnik and Grafenauer [39]; Raybourn [52]; Lu [47]; and Lin and Hsu [53] is divided into two categories, namely, traditional and digital media, so as to provide a reference for selecting test samples (see Table 1).

Table 1. Media types of cultural heritage (as organized by this study).

Type	Narrative Mode	Media
Traditional Media	Factual	Documents, cultural relics, artifacts, photos, sites, historical buildings, and oral historical materials
	Fictional	Painting and literature (fiction)
Digital Media/Multi-media	Factual	Video materials, audio recordings, documentaries, digital archives, and cloud exhibition halls
	Fictional	Films, TV, microvideos, animations and comics, VR, AR, video games, and interactive performances

2.4.2. Evaluation Criterion

In order to develop the criteria for comprehensively evaluating the learning experiences of various media, we employed the strategic experiential modules (SEMs), general learning objectives (GLOs), and unified theory of acceptance and use of technology (UTAUT) methods as the frameworks. Within SEMs, the user experience consists of five dimensions, namely, sense, feel, thought, action, and relation. Among these, “thought” refers to guiding users to consider the benefits brought by products and services, “action” aims to change the user’s habits and living conditions, and “relation” connects users with the wider social system [54]. The GLOs module also contains five dimensions: knowledge and understanding; attitudes and values; activity and behavioral changes; skills; and enjoyment/inspiration/creativity [55]. Thus, both SEMs and GLOs emphasize sensory and emotional experiences, behavioral changes, and outcomes from learning or thinking. Considering the fact that digital learning involves the use of hardware, software, and the internet [22], the UTAUT method was introduced in order to assess the usability of the learning resources. Accordingly, the evaluation criteria of this study is composed of five categories: namely, sensory experience (SE), emotional experience (EE), learning effectiveness (LE), behavioral change (BC), and usage experience (UE). The 20 attributes revealed by previous studies were all grouped into these five categories, thus ensuring the integrity of the evaluation criteria (Table 2).

Table 2. The evaluation criteria for learning experience.

Category	Attribute
1. Sensory Experience	SE1. Sensory Attraction and SE2. Immersive Experience
2. Emotional Experience	EE1. Emotional Resonance and EE2. Affecting
3. Learning Effectiveness	LE1. Familiarity with Historical Facts; LE2. Cognition of National Conditions; LE3. National Identity; LE4. Cherishing Peace; LE5. Connection with the Present; and LE6. Awareness of Social Responsibility
4. Behavior Change	BC1. Stimulating Interest; BC2. Learning Initiative; and BC3. Enhancing Communication
5. Usage Experience	UE1. Affinity; UE2. Autonomy of Learning; UE3. Usability of Equipment; UE4. Interestingness; UE5. Comfortability; UE6. Creativity; and UE7. Content Intelligibility

2.4.3. Research Hypotheses

Studies within the existing literature have shown that the use of historical heritage and digital media in the context of teaching can create a more engaging student experience. In addition, the UTAUT model has shown that users’ gender, age, and experience are mediating variables that affect the intention and behavior of using technology. Accordingly, this study proposes the following hypotheses:

H1. *When compared to traditional media, the digital learning resources of war heritage can create a better learning experience for Chinese college students when undertaking the national WWII history course.*

H2. *The learning experience of digitizing WWII heritage differs depending on demographic variables (e.g., gender and academic background).*

3. Method

3.1. Research Planning

This study can be divided into three phases: (1) The literature review, which aims to categorize the types of media currently used for the dissemination and display of historical heritage, to obtain criteria for the comprehensive evaluation of the learning experience, and to lay a theoretical foundation for the design of the questionnaire. (2) The selection

of stimulus samples according to the research purposes and hypotheses of this study, as well as to design questionnaires on the basis of Phase 1. (3) Data analysis and hypotheses testing. First, the reliability and the validity of the questionnaire were analyzed. Once completed, the differences in the learning experiences of different participants were tested using statistical methods in order to identify the key factors (see Figure 1).

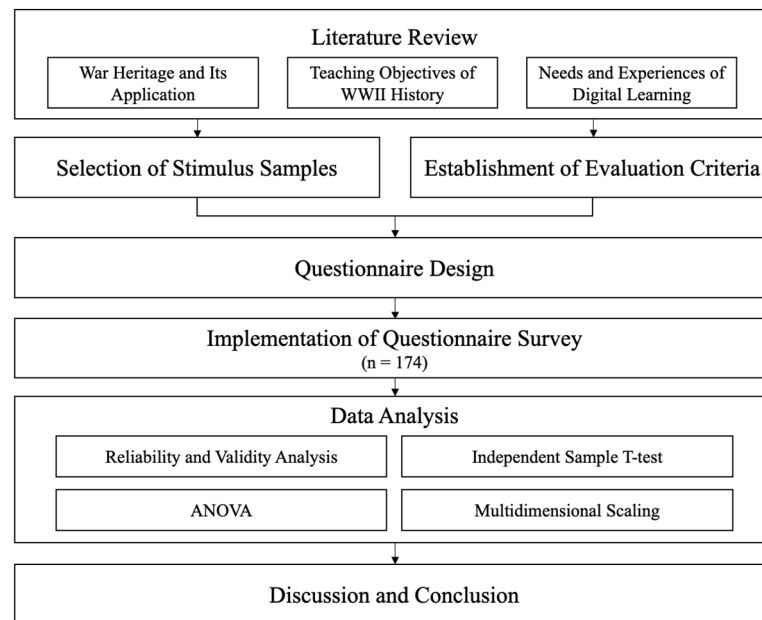


Figure 1. Research process.

3.2. Selection of Stimulus Samples

New media are constantly emerging in the digital era. However, in order to reduce the bias caused by lengthy questionnaires, it is necessary to control the number of samples within a reasonable range. When referring to Table 1, we took film, animation, radio dramas, VR, AR, and digital games as stimulus samples that represented digital media. While film has a history of over 100 years, its previously linear nature has changed in the digital era to the extent that it is now highly integrated with online media [56], thus leading to its categorization as digital media in this study. Radio drama was included in order to explore the impact of nonvisual digital media on learning experience. In terms of content, all samples were based on WWII relics or sites, such as can be found with Sample 4: a film that tells a story related to the famous war site “Sihang Warehouse” in Shanghai. We found that the samples of traditional media (e.g., textbooks, documentary literature, and historical photos) were the most commonly used teaching materials. For example, Sample 1 is the most widely used textbook in Chinese colleges and has clear authority in the context of formal education. A total of nine samples were used for testing, of which six were digital media and three traditional (Table 3).

Table 3. Stimulus samples.


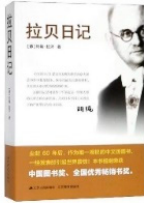






Grouping	Sample	Historical Events/Heritage	Source/Copyright Information
	S1: Textbook, <i>Outline of Modern Chinese History</i> 	Includes the main events that occurred in the Chinese theater of WWII	Higher Education Press
Traditional Media	S2: Documentary literature, <i>The Good Man of Nanking</i> 	The Nanjing massacre	By John Rabe, CITIC Press
	S3: Historical photos, "Bombing of Chongqing" 	The Bombing of Chongqing	-
	S4: Film, <i>Eight Hundred</i> 	Former site of the Shanghai Sihang Warehouse	Huayi Brothers Media Corporation
Digital Media	S5: Animated short film, <i>Remnant Imagination</i> 	The Jiangdongmen site, Nanjing	Nanjing Normal University; The award-winning video of National Memorial Day
	S6: Radio drama, <i>Zhongshan Ship</i>	The Zhongshan Ship's role in the defense of Wuhan	National Cultural Heritage Administration
	S7: VR, <i>Zunyi Conference</i> 	The Anti-encirclement Campaign	Meihao Qianjing Cultural Creativity Co., Ltd.

Table 3. Cont.

Grouping	Sample	Historical Events/Heritage	Source/Copyright Information
	S8: AR, <i>Bethune's Forceps</i> 	The hemostatic forceps used by a field doctor	Developed by this study
	S9: Mobile game, <i>WWII Knowledge Cards</i> 	The New 4th Army's helmet	Developed by this study

3.3. Questionnaire Design, Participants, and Process

The questionnaire used in this study consisted of three parts. The first part contained questions regarding the respondent's basic information, including their gender, grade, and academic background. The second part required the participants to evaluate each of the nine samples. Each sample was introduced in the form of pictures or videos in order to help the participants understand the sample's media type and content. Each sample contained 20 questions, which were developed from the evaluation attributes (Table 4). The questions were in the form of a 7-point Likert scale, ranging from 1 to 7 points, representing "highly disagree," "strongly disagree," "disagree," "general," "agree," "strongly agree," and "highly agree," respectively. The third part concerned the overall evaluation. The participants were asked to select the most effective media, as well as their favorite, from the nine samples.

Table 4. Questionnaire design.

I. Participant Information	
(1) Gender; (2) Grade; and (3) Academic Background	
II. Learning Experience Evaluation	
Category	Question
1. Sensory Experience	Q1: The media is appealing sensorially (visual, auditory, etc.).
	Q2: The media gives me an immersive experience.
2. Emotional Experience	Q3: The media resonates with me emotionally.
	Q4: The media moved me deeply.
3. Learning Effectiveness	Q5: The media increased my understanding of the history of WWII.
	Q6: The media helped me understand the national conditions during WWII.
	Q7: The media enhanced my national identity.
	Q8: The media reinforced my values of cherishing peace.
	Q9: This media helped me think about the focus of the current international situation.
	Q10: This media helped enhance my sense of social responsibility.

Table 4. *Cont.*

4. Action Change	Q11: The media made me more interested in exploring the history of WWII.
	Q12: The media increased my initiative in learning the history of WWII.
	Q13: The media has increased my interaction with teachers and peers.
5. Usage Experience	Q14: The media had an affinity for young people.
	Q15: This media was helpful for me to freely choose the learning content freely.
	Q16: The hardware (device or carrier) of the media was easy to use.
	Q17: This media increased the learning's interest.
	Q18: This media enabled me to freely choose the time and place of study.
	Q19: The media made the learning process creative.
	Q20: The content of the media was easy to understand.
III. Overall Evaluation	
(1) What do you think is the most effective media for learning the history of WWII?	
(2) What is your favorite learning media?	

This study used the “Sojump” platform in order to send online questionnaires to the participants. A total of 250 individuals responded to the survey. After removing the samples whose completion time was too short (i.e., less than 180 s), we obtained 174 valid samples. These results came from 25 provincial administrative regions in China. These included 66 males (37.9%) and 108 females (62.1%). Moreover, there were 48 social science students (27.6%), 43 natural science students (24.7%), and 83 art students (47.7%).

4. Results

4.1. Analysis of Reliability and Validity

SPSS 26.0 software was used to analyze the questionnaire data. The results of the second part of the questionnaire—that is, the mean score and standard deviation (SD) of the matrix scale—are shown in Table 5. Cronbach's alpha test was applied to the scores of the matrix scale; furthermore, the results showed that the α coefficients of the five categories were 0.901, 0.902, 0.932, 0.881, and 0.939, which are all greater than 0.7. Meanwhile, the CITC value of each item was between 0.697 and 0.844, all greater than 0.4. These values show that the questions in the scale possessed a strong correlation and good reliability. In addition, the KMO value obtained from the validity analysis was 0.973, which was greater than 0.7. Furthermore, the p -value of the Bartlett sphere test was 0.000, which was less than 0.05, thereby indicating that the scale possessed high validity.

Table 5. The average and standard deviation of the scale.

	S1	S2	S3	S4	S5	S6	S7	S8	S9
Q1	4.01 (1.315)	4.67 (1.134)	5.33 (0.993)	5.67 (1.119)	5.59 (1.123)	5.14 (1.095)	5.70 (1.185)	5.56 (1.125)	5.41 (1.236)
Q2	3.79 (1.257)	4.65 (1.058)	5.14 (1.022)	5.64 (1.097)	5.53 (0.995)	5.14 (1.100)	5.75 (1.180)	5.44 (1.104)	5.34 (1.288)
Q3	4.17 (1.292)	4.87 (1.020)	5.31 (1.079)	5.64 (1.123)	5.47 (1.068)	5.27 (1.038)	5.48 (1.157)	5.23 (1.061)	5.06 (1.277)

Table 5. Cont.

	S1	S2	S3	S4	S5	S6	S7	S8	S9
Q4	3.87 (1.275)	4.84 (1.121)	5.16 (1.175)	5.59 (1.107)	5.42 (1.082)	5.08 (1.109)	5.40 (1.122)	5.27 (1.081)	4.84 (1.320)
Q5	5.02 (1.226)	4.95 (1.016)	5.13 (0.937)	5.37 (1.066)	5.25 (1.011)	5.15 (1.015)	5.25 (1.087)	5.27 (0.986)	5.03 (1.216)
Q6	5.11 (1.155)	4.86 (1.013)	4.99 (1.153)	5.36 (1.138)	5.19 (1.093)	5.17 (1.077)	5.21 (1.114)	5.15 (1.059)	5.00 (1.254)
Q7	5.17 (1.163)	4.93 (1.068)	5.20 (1.035)	5.53 (1.068)	5.39 (1.040)	5.25 (1.017)	5.30 (1.114)	5.25 (1.034)	5.03 (1.187)
Q8	5.14 (1.223)	5.14 (1.084)	5.48 (0.966)	5.65 (1.030)	5.40 (1.107)	5.29 (1.041)	5.40 (1.069)	5.24 (1.084)	5.05 (1.192)
Q9	4.70 (1.114)	4.66 (0.983)	4.83 (0.998)	5.02 (1.223)	4.93 (1.161)	4.85 (1.133)	5.01 (1.156)	4.93 (1.107)	4.71 (1.321)
Q10	4.91 (1.119)	4.84 (1.047)	5.06 (1.021)	5.34 (1.099)	5.22 (1.096)	5.09 (1.085)	5.15 (1.168)	5.11 (1.028)	4.92 (1.219)
Q11	4.57 (1.283)	4.76 (1.012)	4.98 (1.080)	5.25 (1.120)	5.22 (1.111)	5.02 (1.125)	5.22 (1.102)	5.17 (1.003)	5.03 (1.225)
Q12	4.47 (1.205)	4.72 (1.050)	4.90 (1.176)	5.26 (1.158)	5.14 (1.147)	4.98 (1.153)	5.25 (1.140)	5.18 (0.984)	5.10 (1.226)
Q13	4.14 (1.280)	4.37 (1.039)	4.58 (1.198)	4.94 (1.139)	4.89 (1.145)	4.74 (1.166)	5.16 (1.074)	5.06 (1.046)	4.88 (1.318)
Q14	3.94 (1.266)	4.53 (0.977)	4.74 (1.001)	5.44 (1.160)	5.44 (1.005)	4.94 (1.128)	5.56 (1.135)	5.39 (1.006)	5.33 (1.268)
Q15	4.12 (1.250)	4.64 (1.003)	4.76 (1.035)	5.22 (1.144)	5.26 (1.041)	5.06 (1.052)	5.28 (1.093)	5.24 (1.057)	5.05 (1.208)
Q16	4.51 (1.196)	4.66 (1.034)	4.86 (1.121)	5.29 (1.123)	5.32 (1.080)	5.17 (1.092)	4.82 (1.355)	5.11 (1.162)	5.16 (1.185)
Q17	3.86 (1.292)	4.61 (1.068)	4.86 (1.074)	5.49 (1.068)	5.36 (1.065)	5.08 (1.067)	5.58 (1.065)	5.40 (1.116)	5.35 (1.239)
Q18	4.25 (1.232)	4.70 (1.004)	4.68 (1.182)	5.28 (1.078)	5.31 (1.094)	5.07 (1.089)	5.13 (1.186)	5.19 (1.088)	5.21 (1.185)
Q19	3.83 (1.391)	4.50 (1.063)	4.68 (1.249)	5.26 (1.101)	5.43 (1.055)	5.03 (1.017)	5.62 (1.135)	5.47 (1.068)	5.36 (1.203)
Q20	4.71 (1.168)	4.69 (0.953)	5.26 (1.024)	5.48 (1.052)	5.41 (1.020)	5.24 (0.985)	5.43 (1.066)	5.41 (1.026)	5.24 (1.201)
Total Score	88.28	94.60	99.93	107.73	106.16	101.75	106.67	105.05	102.11

4.2. Hypothesis Test

4.2.1. Difference Test between Digital Media and Traditional Media

To test Hypothesis 1, we calculated the total scores of all nine samples on the 20 evaluation attributes, as well as compared the total scores of the traditional media group (S1 to S3) and digital media group (S4 to S9) by using the independent sample *t*-test method. The results showed that $t = -10.947$ and $p = 0.000$, thus indicating that the digital teaching media scored significantly higher than their traditional counterparts. Then, in the further analysis, the average scores of the evaluation attributes that were covered by each category were calculated, respectively, and the differences in the average scores of both media groups were compared using the independent sample *t*-test. The results showed that digital media scored significantly higher than traditional media ($p < 0.01$) in all five categories (Table 6). Furthermore, the results of the difference test on the total scores of the nine samples, as

produced via the application of ANOVA, showed that $F = 22.14$ and $p = 0.000$, thereby indicating that there was a significant difference between the samples. Moreover, the results of multiple comparisons using Scheffe's method showed that the differences between S1 and all digital media samples reached a significant level. The differences between S2 and S4, S5, S7, and S8 reached a significant level; in addition, S3 was significantly different from S4 ($p = 0.036$) (see Table 7).

Table 6. Differences between media in terms of evaluation categories (*t*-test).

Category	<i>t</i>	<i>p</i>
1. Sensory Experience	−14.799 **	0.000
2. Emotional Experience	−10.017 **	0.000
3. Learning Effectiveness	−3.455 **	0.001
4. Behavioral Change	−8.586 **	0.000
5. Usage Experience	−14.422 **	0.000

** $p < 0.01$.

Table 7. Difference analysis for the total score of the samples (ANOVA).

Traditional Media	Digital Media	Difference	<i>p</i>
S1: Textbook	S4: Film	−19.454 **	0.000
	S5: Animated Short Film	−17.879 **	0.000
	S6: Radio Drama	−13.477 **	0.000
	S7: VR	−18.397 **	0.000
	S8: AR Card	−16.776 **	0.000
	S9: Mobile Game	−13.833 **	0.000
S2: Documentary Literature	S4: Film	−13.126 **	0.000
	S5: Animated Short Film	−11.552 **	0.000
	S7: VR	−12.069 **	0.000
	S8: AR Card	−10.448 **	0.000
S3: Historical Photo	S1: Textbook	11.655 **	0.000
	S4: Film	−7.799 *	0.036

* $p < 0.05$ and ** $p < 0.01$.

The results of the ANOVA difference test on the average scores of S3 and the six digital media samples in the five categories showed that: (1) In terms of sensory experience (category 1), S3 scored significantly lower than S4 and S7 ($p < 0.01$) and significantly higher than S1 and S2 ($p < 0.001$) but did not show significant difference when compared with S6. (2) In terms of emotional experience (category 2), learning effectiveness (category 3), and behavioral change (category 4), the differences in scores between S3 and all digital media samples did not reach a significant level. (3) For the usage experience (category 5), S3 scored significantly lower than S4, S5, S7, S8, and S9, but there was no significant difference when compared with S6 (Table 8).

Table 8. Difference analysis of the samples in the evaluation categories (ANOVA).

Category	I Group	J Group	Difference (I–J)	<i>p</i>
1. Sensory Experience	S3: Historical Photo	S1: Textbook	1.339 **	0.000
		S2: Documentary Literature	0.575 **	0.000
		S4: Film	−0.417 **	0.005
		S7: VR	−0.486 **	0.001
	S6: Radio Drama	S4: Film	−0.509 **	0.000
		S5: Animated Short Film	−0.417 **	0.006
		S7: VR	−0.578 **	0.000

Table 8. Cont.

Category	I Group	J Group	Difference (I–J)	<i>p</i>
2. Emotional Experience	S3: Historical Photo	S1: Textbook	1.210 **	0.000
		S4: Film	−0.664 **	0.000
	S9: Mobile Game	S5: Animated Short Film	−0.491 *	0.023
3. Learning Effectiveness	S9: Mobile Game	S4: Film	−0.421 *	0.029
5. Usage Experience	S3: Historical Photo	S1: Textbook	0.660 **	0.000
		S4: Film	−0.519 **	0.001
		S5: Animated Short Film	−0.525 **	0.001
		S7: VR	−0.510 **	0.001
		S8: AR Card	−0.480 **	0.004
		S9: Mobile Game	−0.408 *	0.039

* $p < 0.05$ and ** $p < 0.01$.

4.2.2. Difference Tests on Demographic Variables

To test Hypothesis 2, we used an independent sample *t*-test in order to compare the differences between the scores of the male and female participants on the 20 evaluation attributes with respect to the six digital media samples. We found that: (1) Sample 4: In terms of “cherishing peace,” “connection with the present,” “awareness of social responsibility,” “learning initiative,” “affinity,” “autonomy of learning,” “usability of equipment,” and “content intelligibility,” the females scored higher than the males; furthermore, the difference reached a significant level ($p < 0.05$). (2) Sample 5: The female scores were significantly higher than the males on both attributes of “cherishing peace” and the “awareness of responsibility” ($p < 0.05$). (3) Sample 6: Regarding the “awareness of responsibility,” which reached the significant level ($t = -2.28$, $p = 0.023$), the female respondents scored significantly higher (5.23) than their male counterparts (4.85). (4) Sample 7: Regarding the “awareness of responsibility,” at the significant level ($t = -2.01$ and $p = 0.047$), the score of female participants (5.81) was significantly higher than that of the males (5.52). (5) Sample 8: Regarding “immersive experience,” at the significant level ($t = -2.03$ and $p = 0.044$), the female members of the sample scored significantly higher (5.57) than the male ones (5.23). (6) Sample 9: In terms of “immersion experience,” “emotional resonance,” and “cherishing peace,” the females highly outperformed males (see Table 9). It can be observed that, among the six digital media samples, four samples (i.e., S4, S5, S6, and S7) showed significant gender differences in regard to the “awareness of social responsibility”; in addition, three samples (i.e., S4, S5, and S9) showed significant gender differences in regard to “cherishing peace”. Lastly, two samples (i.e., S8 and S9) displayed significant gender differences in the context of “immersion experience.” These differences were all characterized by relatively higher scores for the female participants.

Table 9. Gender difference analysis on the evaluation attributes (*t*-test).

Sample	Attribute	<i>t</i>	<i>p</i>	Difference
S4: Film	Q8: Cherishing Peace	−2.76	0.006 **	M < F
	Q9: Connection with the Present	−2.05	0.043 *	M < F
	Q10: Awareness of Social Responsibility	−3.12	0.002 **	M < F
	Q12: Learning Initiative	−2.11	0.037 *	M < F
	Q14: Affinity	−2.44	0.016 *	M < F
	Q15: Autonomy of Learning	−3.95	0.000 **	M < F
	Q16: Usability of Equipment	−2.30	0.022 *	M < F
	Q20: Content Intelligibility	−2.08	0.039 *	M < F
S5: Animated Short Film	Q8: Cherishing Peace	−3.12	0.002 **	M < F
	Q10: Awareness of Social Responsibility	−2.37	0.019 *	M < F
S6: Radio Drama	Q10: Awareness of Social Responsibility	−2.29	0.023 *	M < F
S7: VR	Q10: Awareness of Social Responsibility	−2.01	0.047 *	M < F
S8: AR Card	Q2: Immersive Experience	−2.03	0.044 *	M < F
S9: Mobile Game	Q2: Immersive Experience	−2.77	0.006 **	M < F
	Q3: Emotional Resonance	−2.12	0.035 *	M < F
	Q8: Cherishing Peace	−2.67	0.008 **	M < F

* $p < 0.05$ and ** $p < 0.01$; M = male and F = female.

We employed the ANOVA method in order to test the differences with respect to the scores of the respondents in the three different academic backgrounds, specifically with regard to the 20 evaluation attributes of the six digital media resources. We found that samples 7, 8, and 9 significantly differed in many attributes (Table 10). (1) S7: In terms of “national identity,” social science students scored significantly higher than those in the natural science group ($F = 4.064$ and $p = 0.012$). (2) S8: Regarding the two attributes of “sensory attraction” and “immersive experience”, the scores of the social science group were significantly higher than the natural science group ($p < 0.05$); moreover, regarding the “autonomy of learning,” the social science group scored significantly higher than the art group ($F = 3.552$ and $p = 0.031$). (3) S9: Regarding the attributes of “comfortability” and “content intelligibility,” the natural science group significantly outperformed the art group ($p < 0.05$). However, the attributes of samples 4, 5, and 6 were not significantly different between the participants from different disciplines. The ANOVA results for the traditional media (S1, S2, and S3) revealed differences in the cognitive characteristics and behavioral habits of the respondents from the different academic backgrounds, which is also of reference value. (i) In the attributes of “sensory attraction,” “immersive experience,” “stimulating interest,” and “content intelligibility,” S1 showed that the scores of participants in the natural science group were significantly higher than those in the art group ($p < 0.05$). (ii) S2 showed that the social science group scored significantly higher than the art group with respect to the eight attributes, including “affecting,” “cherishing peace,” “interestingness,” “comfortability,” and “creativity” ($p < 0.05$), whereas, for “affinity,” the score of the natural science group was significantly higher than that of the art group ($F = 5.391$ and $p = 0.005$). (iii) Sample 3 showed that the social science group scored significantly higher than the art group ($p < 0.05$) with respect to the six attributes, including “sensory attraction,” “emotional resonance,” “content intelligibility,” and “cherishing peace” (Table 10). Therefore, four out of nine samples showed between-group differences in “content intelligibility,” and three showed differences in “sensory attraction” and “immersive experience”. Of the 25 significant differences, 22 showed lower scores in the art group, whereas 19 significant differences were found to be involved in the three traditional media samples, whereby all showed lower scores in said group.

Table 10. Difference analysis of academic background on the evaluation attributes (ANOVA).

Sample	Attribute	F	p	Difference
S1: Textbook	Q1: Sensory Attraction	4.275 *	0.015	2 > 3
	Q2: Immersive Experience	3.162 *	0.045	2 > 3
	Q11: Stimulating Interest	3.130 *	0.046	2 > 3
	Q20: Content Intelligibility	4.664 *	0.011	2 > 3
S2: Documentary Literature	Q4: Affecting	3.947 *	0.021	1 > 3
	Q8: Cherishing Peace	4.221 *	0.016	1 > 3
	Q11: Stimulating Interest	3.730 *	0.026	1 > 3
	Q14: Affinity	5.391 **	0.005	2 > 3
	Q15: Autonomy of Learning	6.657 **	0.002	1 > 3
	Q17: Interestingness	8.223 **	0.000	1 > 3
	Q18: Comfortability	7.227 **	0.001	1 > 3
	Q19: Creativity	6.699 **	0.002	1 > 3
S3: Historical Photo	Q20: Content Intelligibility	5.594 **	0.004	1 > 3
	Q1: Sensory Attraction	4.544 *	0.012	1 > 3
	Q2: Immersive Experience	3.848 *	0.023	1 > 3
	Q3: Emotional Resonance	4.144 *	0.017	1 > 3
	Q8: Cherishing Peace	4.268 *	0.016	1 > 3
	Q17: Interestingness	4.765 *	0.010	1 > 3
S7: VR	Q20: Content Intelligibility	7.083 **	0.001	1 > 3
	Q7: National Identity	4.046 *	0.019	1 > 2
S8: AR Card	Q1: Sensory Attraction	4.117 *	0.018	1 > 2
	Q2: Immersive Experience	3.326 *	0.038	1 > 2
	Q15: Autonomy of Learning	3.552 *	0.031	1 > 3
S9: Mobile Game	Q18: Comfortability	3.742 *	0.026	1 > 3
	Q20: Content Intelligibility	4.500 *	0.012	1 > 3

* $p < 0.05$ and ** $p < 0.01$; 1 = Social Sciences Group, 2 = Natural Sciences Group, and 3 = Arts Group.

4.3. Analysis of Multidimensional Scaling

This study developed 20 attributes for the purposes of evaluating the teaching media of WWII history. In order to reduce the dimensions and to better extract the key factors, we used multidimensional scaling (MDS) in order to visualize the data. We found that when the 20 attributes were reduced to two dimensions, i.e., stress = 0.039 (< 0.200) and RSQ = 0.997 (> 0.700), there was an indication of an ideal degree of fit. The perceptual map of the evaluation attributes and media samples in the two-dimensional space is shown in Figure 2. The angle between attributes Q8 (cherishing peace) and Q19 (creativity) was close to 90° , thus entailing that both could be used to evaluate the nine media samples to a large extent. The vectors of Q8 and Q19 were used to divide the nine samples into the following four groups: (1) the coordinates of S1 and S2 were located in the reverse extension area of the vectors of Q8 and Q19, thus indicating that they were far from all the other attributes; (2) the coordinates of S1 and S6 were in the positive range relative to Q8, and in the negative, or close to zero, range relative to Q19, thus indicating that both could effectively trigger the respondents' cognition and emotion of cherishing peace, but are lacking in creativity; (3) S8 and S9 were positive relative to Q19, and negative, or close to zero, when relative to Q8, thus indicating that, while creative, they would fail to help the participants achieve their learning outcomes; and (4) S4, S5, and S7 resulted in positive performances on all evaluation attributes, thus showing these samples to be closer to the ideal situation of the respondents.

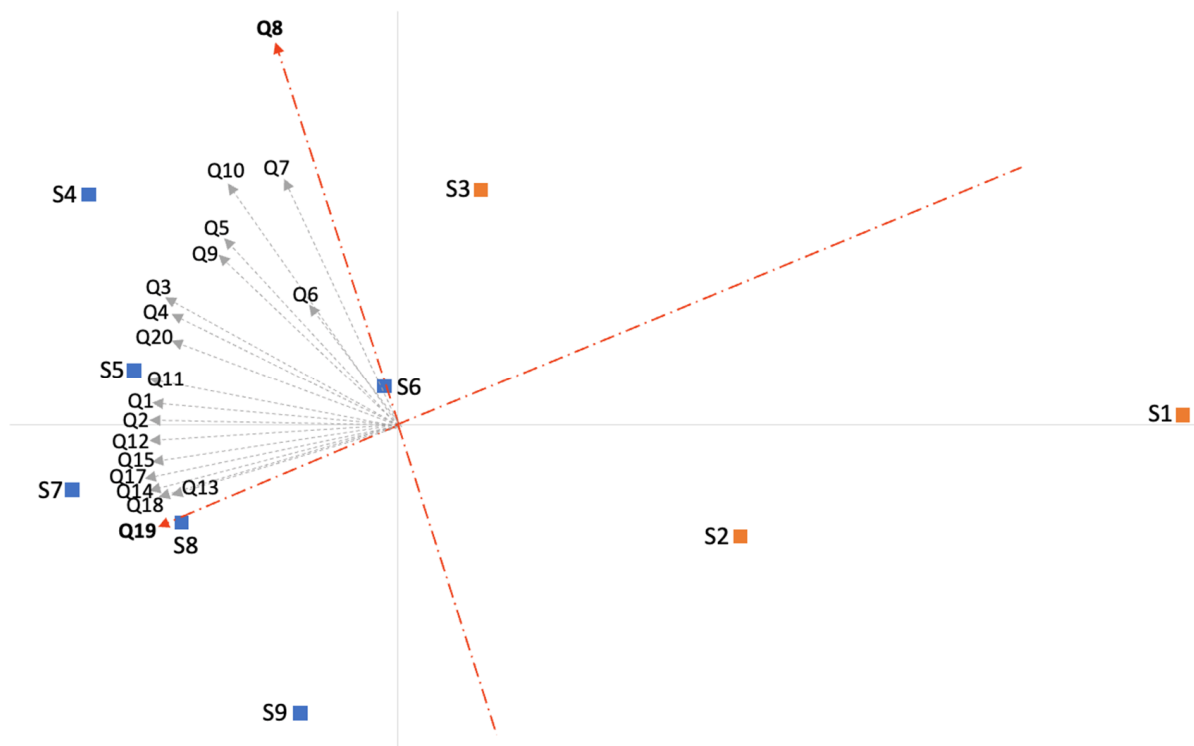


Figure 2. Perceptual map of the stimulus samples.

The nine samples were ranked on the dimension of “cherishing peace,”; with respect to this, the top-ranked samples were S4, S3, S5, and S7. When the nine samples were sorted on the “creativity” dimension, the top samples were S7, S8, S5, S9, and S4, respectively (Figure 3). When compared with film and animation, the digital interactive media represented by VR and games were found to be more creative. Furthermore, the descriptive statistics showed that the participants believed that the most effective media samples for WWII history learning were S4, S7, S1, and S3. In addition, the samples with higher favorability were S4, S7, S5, and S9 (Figure 4).



Figure 3. Ranking of the stimulus samples (Q8 and Q19).

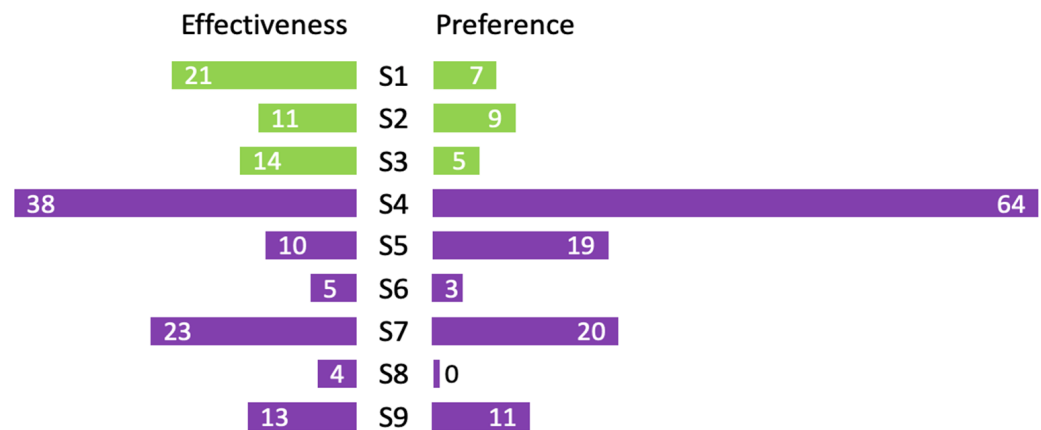


Figure 4. Votes regarding the stimulus samples (effectiveness and preference).

5. Discussion

5.1. Research Findings

The average total scores of the six digital media samples were generally higher than those of the three traditional media ones (see Table 6). The results of the independent sample *t*-test also proved that the average total scores of the digital media samples were significantly higher than those of traditional media. Furthermore, the ANOVA results showed that the digital media samples were ranked as significantly higher than the traditional media in five dimensions, namely, sensory experience, emotional experience, usage experience, learning effectiveness, and the promotion of behavioral change. Accordingly, this study rejects the null hypothesis and accepts Hypothesis 1: In general, the digital teaching resources of war heritage can significantly improve college students' learning experience when compared with traditional media.

While testing for demographic variables, we found that the female participants scored significantly higher than the males in several attributes of sensory experience and learning effectiveness. Research in the field of psychology has shown that women are often superior to men in various senses, such as the ability to perceive, understand, and process emotions [57]. In addition, women tend to use more diversified sensory combinations in their learning strategies [58]. This, to a certain extent, explains why our female participants showed themselves to be more able in capturing effective information from sensory and emotional experiences in order to improve learning outcomes. Conversely, the men's learning styles tend to be more rational and logical [59], as well as use less divergent thinking [60]. It can be seen that the digital resources used in the WWII history course may not be consistent with the learning strategies and thinking patterns of certain male learners. Therefore, the digital resources used in the WWII history course should more clearly outline the logic and relevance between the digital war heritage and the teaching objectives.

In terms of the different academic backgrounds, the participants in the art group scored significantly lower on a large number of items with respect to the three traditional media samples than those in the natural science and social science groups. In particular, regarding documentary literature, the difference between the art and science groups was especially significant for all seven attributes when involved in the "experience of use" category. In contrast, regarding the digital media samples, the art group scored lower on incredibly few items when compared with the science groups. According to Rödder [61], Eber and Wolfe [62], and Walker et al. [63], the reason for this may be that those who possess professional training in art are more adept at processing sensory materials—such as graphics, video and sound—and are more inclined to figurative and pictorial modes of thinking. Regarding the historical photo, the data analysis showed that the art participants found the content difficult to understand and lacking in sensory appeal. This may be related to the low clarity of the historical photo in the questionnaire. The experience of the art group reveals that certain users possess higher expectations for the visual presentation

of media content, the quality of the visual experience, as well as in regard to the simplicity and usability of information.

According to the MDS analysis, “cherishing peace” and “creativity” were the key factors in evaluating the media for WWII history courses. The perceptual map (Figure 2) created by MDS shows that the three media—films, animated short films, and VR—perform satisfactorily on both dimensions of “cherishing peace” and “creativity”; therefore, they are ideal media for the purposes of improving the learning experience of college students. However, when considering the dimension of “cherishing peace” alone, films and animated short films clearly outperformed popular media such as VR, AR cards, and mobile games. The ANOVA results also revealed that films and animated short films are superior to other digital media in terms of their emotional experience, learning effectiveness, and user experience. Other than radio drama, the remaining five digital media can be divided into two types: film and animation belong to digital video art, while VR, AR, and video games are examples of digital interactive media that require users to mobilize visual, auditory, kinesthetic, and other senses, as well as to actively explore and discover, rather than passively receive information. Cognitive load theory (CLT) states that humans possess a limited capacity for working memory when processing information. If the teaching material is presented in a complex manner, it will generate a high extraneous cognitive load, thus hindering learning [64]. In this study, we speculated that the reason for VR, AR, and mobile games scoring lower in learning effectiveness could relate to their more complex interactions, which consequently gave the participants less time to think about the learning content. Therefore, the use of less interactive media, such as films and animations, in university WWII history courses may achieve better teaching effectiveness.

In terms of sensory experience, the historical photo scored significantly lower than film and VR. When compared with film and VR, photos are characterized by a lack of dynamic images, multisensory stimulation, interactivity, and narrative. This may be due to the fact that films, animated shorts, and VR all integrate visual, auditory, and even kinesthetic multisensory stimuli, while radio drama lacks these visual experiences. These results indicate the importance of the quality of multisensory experiences, the dynamism of images, and narrative media content in enhancing the sensory appeal of educational media to college students.

In the participants’ evaluation of the “most effective” media, textbooks were ranked third, ahead of such digital media sources as mobile games, animation, and AR cards. However, the MDS results show that the textbooks did not conform to any one attribute. We, therefore, speculate that certain characteristics of the textbooks are outside the evaluation criteria. According to the Chinese higher education syllabus, the history of WWII is a compulsory course and a required examination; thus, achieving good examination results is also a prerequisite for obtaining degrees and applying for further education. While textbooks are clearly of extreme relevance to exam content, when considering the learning strategies and pattern of certain male participants, it is suggested in this study that strengthening the relevance of digital learning resources to teaching objectives and examination content may enhance college students’ recognition of the effectiveness of digital media in learning.

5.2. Research Implications

The above research findings entail practical implications for college educators in China. First, this study demonstrates the effectiveness of the teaching strategy of transforming war heritage into digital resources and applying them to WWII history courses. Therefore, this strategy can be extended to more universities and colleges in China. Second, this study selected the most effective media for teachers and the providers of educational resources. Currently, emerging technologies and concepts, such as AR, VR, and the metaverse are in the spotlight in China and in many other countries. However, from the perspective of students, low-interactive media (e.g., films and animations) are more effective in enhancing learning than VR, AR, etc. This, therefore, indicates that teachers, as well as the producers

of teaching resources, should focus their limited resources and funds on the development of digital resources, such as films or animations. Third, through this study it was found that “creativity” and “cherishing peace” are the key factors in the learning experience of WWII history courses for college students. Therefore, in the selection or production of teaching resources, particular attention should be paid to evaluating the creativity and the values of peace contained in the teaching materials. If creativity is added to the explanation and interpretation of the teaching content, thus highlighting the value of peace, it will then be able to generate more resonance and mutual recognition with contemporary college students in China.

In order to improve the existing digital teaching resources, in this study, it is proposed that the following specific suggestions be followed in order to provide a reference for the developers and designers of teaching resources:

(1) Improve the quality of multisensory experiences in the digital teaching media regarding war heritage. The analysis of historical photos and radio dramas reveals that educational media that lacks visual or auditory information may result in poor sensory and emotional user experiences. Moreover, narrative, dynamic images, interactive images, and immersive experiences are more greatly attuned to the preferences of the younger generations and can help improve their learning effectiveness.

(2) Reduce human–computer interaction difficulties in digital teaching media. Digitizing war heritage and applying it to history teaching can enhance both the learning experience and effectiveness. As a teaching method, interactive technology should not unnecessarily increase the cognitive load of users. The devices and programs for new media, such as VR, AR, and games should consider adopting simpler and more intuitive human–computer interfaces and interactive modes in order to increase user comfort and autonomy.

(3) Strengthen the correlation between the digital resources regarding war heritage and the teaching content of WWII history. When considering the fact that textbooks are still one of the most effective media types for learning, providing college students with digital resources that are highly relevant to textbooks will also help art students understand the syllabus content more easily through a multisensory approach. Meanwhile, this also aligns with the characteristics of male students’ preference for rational, linear, and inductive thinking, thereby improving their learning effectiveness also.

(4) Build a vision for peace and sustainable development through digital media narratives. Through this study’s data analysis, it was revealed that the significance of establishing WWII history education in colleges goes beyond only understanding historical facts and strengthening the sense of national identity, but also includes using the power of digital media storytelling to guide the students of the younger generations in order to establish the values of cherishing peace. In so doing this, it could lead the world toward a more just, mutually trusting, and sustainable future.

Throughout this study, we have emphasized the status, value, and needs of students as the subjects of learning activities. In addition, we have used these as the basis for constructing the evaluation criterion. In this study, we also focused on the differences between students of different gender and professional backgrounds. Therefore, the above suggestions can increase the inclusiveness of digital learning resources with respect to a variety of students.

5.3. Research Limitations and Future Studies

There are three main limitations of this study. First, this study possesses a strong short-term validity. According to the insights provided by CHAT and AS, educational activities are multifactor systems that are sensitive to social, economic, cultural, and technological changes. As a result, the system is constantly generating internal tensions and contradictions. For example, when the assessment system with respect to the WWII history course changes, the needs of college students regarding teaching media and content may

change. Therefore, the findings, perspectives, and suggestions proposed by this study may have short-term validity.

Second, there may be a degree of evaluator error in this study. Although all types of studies may have bias, this study is unique in that participants were asked to self-evaluate their learning experiences with stimulus samples. Therefore, the results may differ from the actual situation.

Third, this study possesses strong regional characteristics. The findings of this study are based entirely on a questionnaire survey of Chinese college students. China has its own special cultural context and social environment. For example, Chinese colleges and universities place special emphasis on patriotic education for students, as well as emphasize exams and grades in the teaching of WWII history, which are not common in other countries or regions. Therefore, the findings and suggestions in this study may not be applicable to similar courses in other regions.

As such, our suggestions for future research include: (1) Adopting longitudinal research in order to track the changes in students' learning experiences over time. (2) Include a survey study on the teachers of this course and to compare the data with the students' survey in order to gain a more accurate understanding. (3) Use the research methods and process design provided in this study within a certain region's own socio-cultural context and establish localized criteria, so as to propose suggestions, strategies, and solutions that are appropriate for the local situation regarding WWII education.

6. Conclusions

The global pandemic has profoundly changed the way people live, work, and learn around the world. As a sensitive system, each element of learning activities has undergone a continuous adaptation with respect to the trend of online and digital education. At the same time, the pandemic has also changed the economic situation in many countries and regions. Teachers, schools, and even local education administrators must address the issue of how to achieve greater educational outcomes at a lower cost.

Starting from the needs of college students' digital learning and the requirements regarding the objectives of WWII history courses, an evaluation criterion containing 20 attributes was constructed through this study. Based on data from a survey of 174 Chinese college students, this study demonstrated the effectiveness of applying digital war heritage to the teaching of WWII history in order to enhance the learning experience of contemporary Chinese college students. In the context of the current economic and cultural development of Chinese society, low-interactive media such as films and animated short films may be more likely to achieve satisfactory learning outcomes than emerging media such as AR and VR. Among the 20 attributes, Chinese university students defined "creativity" as the factor they valued most, which provides a reference for teachers, developers, and the designers of digital teaching resources.

Our research also showed an encouraging result in terms of the values of the new generation of Chinese young people who regard "cherishing peace" as the primary meaning of learning about WWII history, which highlighted their values. The 2030 Agenda for Sustainable Development released by the United Nations takes the establishment of a peaceful, just, inclusive, and mutually trustworthy international community as one of the Sustainable Development Goals (SDGs). At a time when human society is suffering from a global pandemic, a slowing down of economic development, and escalating regional conflicts, the significance of applying digital resources regarding war heritage to the history education of Chinese college students is important—not only in the sense of enabling them to achieve excellent grades, but also in the sense of providing realistic value to war heritage in the digital age. Furthermore, such an approach may help human society form a vision and consensus for future-oriented sustainable development.

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