Construction of an Indicator System for Archival Practice Teaching Reform and Empirical Research: A Case Study of the "Shangda Memory" Project (Postprint)

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Abstract

[Purpose/Significance] To examine the practical effectiveness of the "Shangda Memory" archival practice teaching project and thereby provide experience and improvement measures for archival practice teaching reform in various universities. [Method/Process] An archival practice teaching indicator system was constructed from five dimensions: professional competence, information literacy, interpersonal communication, ideological and political education effects, and interdisciplinary learning; SPSS 26.0 was used for questionnaire analysis to verify hypotheses. [Results/Conclusions] The "Shangda Memory" project can enhance students' professional competence and information literacy, possesses strong ideological and political education effects, and can promote students' interdisciplinary learning to a certain extent. Archival practice teaching can draw on the experience of "Shangda Memory" by identifying entry points for archival professional practice, strengthening the depth of cooperation within and outside the university, linking professional courses with practice teaching, and expanding the project platform.

Full Text

Preamble

Construction and Empirical Research on the Index System for Archives Practice Teaching Reform: A Case Study of the "Memory of Shanghai University" Project

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Abstract: *[Purpose/Significance]* This study examines the practical effects of the "Memory of Shanghai University" archives practice teaching project to provide experience and improvement measures for archives practice teaching reform in universities. *[Method/Process]* An index system for archives practice teaching was constructed from five dimensions: professional quality, information literacy, interpersonal communication, ideological and political effects, and interdisciplinary learning. SPSS 26.0 was used for questionnaire analysis to verify hypotheses. *[Result/Conclusion]* The "Memory of Shanghai University" project can improve students' professional and information literacy, has strong ideological and political effects, and can promote interdisciplinary learning to a certain extent. Archives practice teaching can draw on the experience of "Memory of Shanghai University" by finding entry points for archives professional practice, strengthening cooperation depth inside and outside the university, linking professional courses with practice teaching, and expanding the project platform.

Keywords: archival science; practical teaching; index construction; Memory of Shanghai University

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In 2012, to fully implement the *National Medium- and Long-Term Education Reform and Development Plan Outline (2010-2020)*, the Ministry of Education of the People's Republic of China further required universities to strengthen practice teaching and deepen reform of practice teaching methods [1]. In 2018, the national archives institutional reform separated the Archives Bureau from the Archives, transforming archives from mere custodians of records into cultural institutions. This has placed higher demands on archivists and archives education, requiring archives students to master practical archival work skills while learning basic archival theory. Strengthening archives practice teaching is essential for implementing quality education and improving the quality of archives education.

2. Research Status

Currently, Chinese academic research on archives practice teaching mainly focuses on three aspects: improvement of teaching methods for archives courses, construction of evaluation systems for archives practice teaching, and reform of disciplinary practice teaching models.

In terms of improving course practice teaching methods, Zhao Fang [2] introduced experiential teaching from American archives education for course practice teaching reform. Qu Zhilin [3] designed improvements based on the deficiencies in practice teaching of *Archival Document Compilation*, creating four modules: promotion guidance, hands-on practice, sharing and reporting, and improvement feedback. Huo Yanfang [4] discussed improvements to practice teaching methods for the *Archival Protection Technology* course from the per-

spectives of instructors, teaching methods, and monitoring and evaluation of teaching effectiveness.

Regarding the construction of archives practice teaching evaluation systems, Yu Yuanyuan [5] and Liu Yinghong [6], taking Heilongjiang University's archives major as an example, constructed a three-dimensional evaluation system for professional experimental courses, professional internships, and innovation capabilities based on different evaluation subjects and objects. Research on evaluation system construction for archives practice teaching is limited to Heilongjiang University, and the evaluation system construction tends to be biased toward experience summarization.

In terms of reforming disciplinary practice teaching models, university teachers have discussed reform methods based on their institutions' archives practice teaching models. Wang Xiezhou [7], taking Xiangtan University's archives major as an example, proposed professional practice teaching reform through building internship bases, constructing practice teaching systems, enriching practice teaching methods, and improving evaluation mechanisms. Zhao Shumei [8] argued that practice teaching should be conducted from three dimensions: experiments, internships, and practical training. Wang Qiaoling [9-10], combining the current situation of Beijing Union University's archives major, proposed construction ideas for an "off-campus talent training base system" and a "dual-integration ideology" training model. Wang Yingjie [11], based on a survey of undergraduate practice teaching in 32 Chinese universities' archives majors, proposed a "one line, three points" practice teaching model that uses students' initial employment rate, paper publication status, and discipline competition awards as effectiveness evaluations. Zhao Fang [12] proposed introducing the American part-time teacher employment system for library and information science majors to reform practice teaching.

Research on archives practice teaching models remains at the level of proposing new models and sharing experiences, lacking in-depth analysis, specific case studies, effectiveness testing, or quantitative analysis. To cultivate innovative talents meeting the needs of social transformation, Shanghai University launched the "Memory of Shanghai University" joint project for archives extracurricular practice teaching in 2016, which has accumulated five years of practice teaching experience. This paper conducts empirical research on the "Memory of Shanghai University" project to test the effectiveness of this archives practice teaching model and identify its experiences.

3. Research Design

This paper proposes hypotheses based on the expected objectives of Shanghai University's "Memory of Shanghai University" archives practice teaching project, constructs an index system for archives practice teaching reform, verifies hypotheses through questionnaires administered to project participants, and tests the project's effectiveness to summarize experiences in archives practice

teaching.

3.1 Project Overview

During the 1920s-1930s "Great Revolution" period, there was a widespread saying: "For military, there is Whampoa; for literature, there is Shanghai University" and "In the north, there is Peking University; in the south, there is Shanghai University." Although the old Shanghai University operated for a short time, it gathered many renowned scholars and cultivated numerous outstanding revolutionaries and professionals. To enrich and improve the collection, development, and utilization of archival documents on old Shanghai University figures, inherit the memory of Shanghai University, cultivate professional quality and campus sentiment among archives and related majors, and promote innovative talent cultivation and education reform, Shanghai University's Department of Library, Information and Archives launched the "Memory of Shanghai University" joint project for practice teaching in 2016, which has now entered its third season. Season 1 was in 2016, Season 2 in 2018, and Season 3 in 2020. The project specifically involves searching for and disseminating archival documents on old Shanghai University figures.

The project's expected student cultivation objectives are: "To improve students' knowledge structure, cultivate professional concepts, enhance students' ability to analyze and solve problems using professional knowledge, increase confidence in the archives major, connect classroom knowledge with specific problems, improve the ability to manage, utilize, and display archives using modern information technology, and strengthen students' skills in serving socialist construction and their dedication to contributing to the motherland and society."

The project aims to address three teaching problems: (1) The awkwardness of "ideological and political education" that occurs when teachers abruptly switch to ideological content during professional courses; (2) The problem of linking theory with practice, as traditional teaching methods often use a "cramming" approach where students passively receive knowledge, making it difficult to develop independent thinking and critical thinking skills and 不利于 students applying professional knowledge to solve practical problems; (3) The problem of implementing former Shanghai University President Qian Weichang's educational philosophy of "tearing down four walls"—the wall between school and society, between teaching and research, between departments and disciplines, and between teaching and learning.

3.2 Hypotheses on Practice Teaching Effects

Based on the project's expected student cultivation objectives and the teaching problems it aims to solve, four hypotheses are proposed:

H1: Participation in the "Memory of Shanghai University" project can improve students' professional quality.

H2: Participation in the "Memory of Shanghai University" project can improve students' information literacy.

H3: Participation in the "Memory of Shanghai University" project can develop students' interpersonal communication skills.

H4: The "Memory of Shanghai University" project has ideological and political education effects.

3.3 Design of Practice Teaching Effect Indicators

Professional Quality: Li Jun [14] proposed that archives professionals should possess dedication to the archival cause, broad and deep archival knowledge, and a reasonable knowledge structure. Zhang Yan [15] required archives personnel to master interdisciplinary knowledge, understand archival standards, and actively develop archives from the perspectives of archival information establishment and utilization. Zhang Yan [16] designed questionnaires to understand archives students' professional quality from the dimensions of professional attitude, professional identity, professional learning, and professional sustainability. Li Jun's archival knowledge, Zhang Yan's archival standards, and archival establishment and utilization knowledge, and Zhang Yan's professional learning all belong to the category of professional knowledge. Professional sustainability belongs to the field of career planning and is not discussed in this paper's professional quality dimension. Therefore, professional knowledge indicators were summarized, and combined with Zhang Yan's professional attitude and professional identity, and Zhang Yan's interdisciplinary learning as four indicators under professional quality.

Information Literacy: At the 2015 Fourth China-US International Symposium on Library and Information Science Education in the Digital Age, Chinese scholars discussed education issues in library, information, and archival science, emphasizing the importance of cultivating students' information literacy in the big data era [16]. In fact, China began exploring the connotation and cultivation methods of information literacy in the 1990s. The concept of "information literacy" was first proposed by Paul Zurkowski, Chairman of the Information Industry Association, at the U.S. National Commission on Libraries and Information Science in 1974, and Jin Guoqing [18] introduced this concept to China, proposing that information literacy is the continuation and expansion of traditional cultural literacy in the information society. Zhang Qianwei [19] believed that information literacy consists of information awareness, information knowledge, and information ability, an interpretation that has received the widest recognition and citation in academia. Therefore, this paper selects information awareness, information knowledge, and information ability as the three indicators of information literacy.

Interpersonal Communication: Wang Xiaohong [20], when studying university students' interpersonal communication ability, used interpersonal cognitive ability, emotional control ability, and communication ability as evaluation in-

dicators. Liu Wen, Han Jing, and Zhang Lina [21] studied interpersonal communication ability from the dimensions of interpersonal cognition and social withdrawal. Both evaluations of interpersonal communication ability are frequently cited in domestic academia. Wang Xiaohong and Liu Wen et al. both mentioned the interpersonal cognition indicator, so this paper directly adopts it. Wang Xiaohong's emotional control and communication, and Liu Wen et al.'s social withdrawal actually refer to individuals' attitudes and methods for coordinating and resolving conflicts or difficulties in interpersonal communication, which this paper summarizes as interpersonal coordination. Therefore, this paper selects interpersonal cognition and interpersonal coordination as the two indicators of interpersonal communication.

Ideological and Political Effects: The Ministry of Education issued the *Guidelines for the Construction of Curriculum Ideological and Political Education in Higher Education Institutions*, proposing to comprehensively promote curriculum ideological and political education nationwide, with patriotism, love for the Party, and love for the school as the main line to guide students in deeply understanding socialist core values. Gao Deyi and Zong Aidong [22] designed construction plans for ideological and political theory courses in higher education, transmitting socialist values through implicit education in professional education courses. Qiu Weiguang [23] proposed that the goal of "curriculum ideological and political education" is to cultivate morality and nurture people, supporting knowledge orientation with correct value orientation and guiding students to realize their own values. Thus, ideological and political effects are reflected in two aspects: the cultivation of national sentiment and the guidance and establishment of values. Therefore, this paper selects national sentiment and values as the two indicators of ideological and political effects.

Based on the existing research results from relevant literature and the project proposal content, a three-level index system for archives practice teaching reform was initially established, as shown in .

3.4 Data Collection and Processing

3.4.1 Questionnaire Design and Data Collection

The questionnaire was designed based on the three-level indicators and distributed and collected online through Wenjuanxing. The collected data was used to evaluate student cultivation effects. The questionnaire included two parts: basic information about respondents and changes in indicators before and after participating in the "Memory of Shanghai University" project. Observed variables used a five-point Likert scale from "1" to "5," indicating influence degree from very small to very large. The questionnaire was distributed on December 20, 2020, with a deadline of January 10, 2021. A total of 55 students participating in the "Memory of Shanghai University" project completed the questionnaire, yielding 54 valid responses after screening, for an effective rate of 98%.

3.4.2 Sample Descriptive Analysis

The research sample consisted of students from Shanghai University's Department of Library, Information and Archives who participated in the "Memory of Shanghai University" project. Among the 54 valid samples, 17 were male (31.48%) and 37 were female (68.52%). The respondents included participants from the 2015 to 2020 cohorts: 5 from 2015 (9.26%), 19 from 2016 (35.19%), 4 from 2017 (7.41%), 12 from 2018 (22.22%), and 14 from 2019 (25.93%). Forty-six students (85.19%) majored in archival science, and 8 (14.81%) majored in information resource management. At the time of the survey, 40 respondents were still students, while 14 had already graduated and were working.

3.4.3 Overall Questionnaire Analysis

(1) Questionnaire Validity Analysis. This study conducted factor analysis for multivariate statistics. Before factor analysis, the KMO test statistic and Bartlett's test of sphericity were used to examine the correlation between variables. The KMO test coefficient ranges from 0 to 1, with values closer to 1 indicating better questionnaire validity. As shown in , the KMO test coefficient was 0.818, indicating good questionnaire validity. The significance of Bartlett's test was infinitely close to 0, rejecting the null hypothesis, so the questionnaire had good structural validity. Additionally, through logical analysis, the questionnaire measurement indicators matched the original survey assumptions, and the questionnaire items effectively represented the content of each indicator, meeting measurement requirements and demonstrating good content validity.

(2) Questionnaire Reliability Analysis. This study used Cronbach's Alpha coefficient created by L.J. Cronbach to test reliability. If $\alpha > 0.9$, the scale design is reasonable and highly persuasive. As shown in , the Cronbach's Alpha value for this measurement was 0.980, and the standardized item Cronbach's Alpha was also 0.980, both > 0.9, indicating very high internal data stability and reliability.

(3) Inter-Item Correlation Analysis. Higher correlation coefficients between item variables indicate higher internal consistency. According to the inter-item correlation matrix in , the secondary indicators under the first-level indicators of information literacy, interpersonal communication, and ideological/political effects showed high internal consistency. Under the professional quality first-level indicator, the three secondary indicators of professional attitude, professional knowledge, and professional identity showed high internal consistency, while the interdisciplinary learning secondary indicator had lower correlation with the first three. Interdisciplinary learning can be moved out from under the professional quality indicator to become a fifth first-level indicator.

Thus, the hypotheses in this paper were revised to:

H1: Participation in the "Memory of Shanghai University" project can improve students' professional quality.

H2: Participation in the "Memory of Shanghai University" project can improve students' information literacy.

H3: Participation in the "Memory of Shanghai University" project can develop students' interpersonal communication skills.

H4: The "Memory of Shanghai University" project has ideological and political education effects.

H5: Participation in the "Memory of Shanghai University" project can promote students' interdisciplinary learning.

4. Research Results

4.1 Analysis of Professional Quality Indicators

C1-C4 measure students' professional attitude. The pre-participation mean score was 3.59, and the post-participation mean was 3.71, with 19 students (35.19%) showing increased scores. This indicates that before participating in the "Memory of Shanghai University" project, students could already listen attentively in professional courses and actively acquire professional knowledge. However, students still lacked clear long-term plans or short-term goals for professional learning and rarely read professional books after class. After participation, students showed higher improvement in the initiative to read professional books after class and discuss professional issues with classmates and teachers after class, with mean change rates of 6.91% and 3.58%, respectively.

C5-C16 measure students' professional knowledge level. The pre-participation mean was 3.16, and the post-participation mean was 3.61, with 32 students (59.30%) showing increased scores. Students' professional knowledge improvement was the highest among secondary indicators of professional quality, with understanding levels of archival compilation, appraisal, and regulations and standards increasing by 16.18%, 16.00%, and 15.69%, respectively. This shows that the "Memory of Shanghai University" project effectively enhanced students' understanding of professional knowledge, strengthened their mastery of archival regulations and standards, and helped them become familiar with archival appraisal and compilation methods.

C17-C21 measure students' professional identity level. The pre-participation mean was 3.93, and the post-participation mean was 4.09, with 17 students (31.48%) showing increased scores. The overall scoring level for professional identity was relatively high, with students widely recognizing that archives have social memory value and should be extensively collected and actively developed and utilized. Among these, indicator C20 showed a mean change rate of 7.27%, suggesting that through the "Memory of Shanghai University" project, students had more frequent contact and closer communication with teachers, thereby recognizing the rationality of Shanghai University's archival science curriculum system and the strength of its faculty.

The sum of all indicator scores was used as the total professional quality evaluation score for the 54 respondents before and after participation. A K-S normality test on the difference between the two datasets yielded $P < 0.05$, indicating non-normal distribution. Therefore, the Wilcoxon signed-rank test was used to examine differences before and after participation. As shown in , the results showed a Z-value of -5.240 and an asymptotic two-tailed P-value of $0.000 < 0.05$, indicating statistically significant differences. That is, respondents showed significant differences in professional quality before and after participating in the "Memory of Shanghai University" project.

TABLE:6 Wilcoxon Signed-Rank Test for Professional Quality

Test Statistic	Asymptotic Significance (Two-Tailed)
Post-Pre	-5.240b
	0.000

In summary, participating students showed improved professional attitudes, greater initiative in actively acquiring professional knowledge after class through discussions with teachers and classmates and reading professional books; enhanced professional knowledge levels, particularly deeper understanding of archival laws and regulations and retrieval and compilation work; and stronger professional identity, recognizing the memory attributes of archives and the value of their preservation and development. Hypothesis H1 is supported.

4.2 Analysis of Information Literacy Indicators

C22-C24 measure students' information awareness. The pre-participation mean was 3.50, and the post-participation mean was 3.72, with 18 students (33.33%) showing increased scores. After participating in the "Memory of Shanghai University" project, students showed slight improvement in recognizing their internal and external information needs, no longer merely retrieving information to achieve a specific purpose but actively acquiring information for self-improvement. Additionally, students' ability to rapidly and efficiently extract valuable information improved significantly, with a change rate of 7.58%.

C25-C30 measure students' information knowledge level. The pre-participation mean was 3.26, and the post-participation mean was 3.68, with 29 students (53.70%) showing increased scores. Before participation, students already recognized the significant role and bright development prospects of information technology in modern society but had low understanding of information technology principles and information methods and principles. After participation, students showed significant improvement in understanding these aspects, with change rates of 13.83% and 17.36%, respectively. Simultaneously, students were exposed to more information theoretical knowledge, personally experienced the information society, and gained deeper understanding of information knowledge.

TABLE:7 Pre- and Post-Participation Changes

Item	Pre-Participation Mean	Post-Participation Mean	Change Rate (%)
C22: I have external information needs	3.50	3.72	12.80
C23: I have internal information needs transformed from social requirements	3.26	3.68	11.64
C24: I can rapidly and efficiently extract valuable information	3.50	3.72	17.36

Item	Pre-Participation Mean	Post-Participation Mean	Change Rate (%)
C25: Understanding of information theoretical knowledge	3.26	3.68	13.83
C26: Understanding of information society and its impact	3.26	3.68	10.39
C27: Understanding of information methods and principles	3.26	3.68	11.11

Item	Pre-Participation Mean	Post-Participation Mean	Change Rate (%)
C28: Understanding of information technology principles	3.26	3.68	10.39
C29: Understanding of information technology functions	3.26	3.68	11.11

Item	Pre-Participation Mean	Post-Participation Mean	Change Rate (%)
C30: Understanding of information technology development prospects	3.26	3.68	11.11

In the "Memory of Shanghai University" project, 46 students (85.19%) conducted information collection work. The main channels for information collection were search engines like Baidu, archival websites, archival WeChat official accounts, and library websites. The number of students choosing archival websites as a retrieval channel increased significantly, with a proportion increase of 34.78%. More students chose to use online and offline resources from archives and libraries rather than relying solely on search engines or social platforms, making the collected information more authoritative. Additionally, the number of students choosing oral interviews for information collection increased by 13, helping students collect more content not recorded on paper.

Fifteen students (27.78%) conducted information development work. Eight students (53.33%) performed all tasks of authenticity appraisal, information mining, logical sorting, and language editing during information development, gaining a more comprehensive understanding of information development work content. Thirty students (55.56%) conducted information dissemination work. The primary platforms for information dissemination were the "Shanghai University Stories" and Shanghai University Alumni Association WeChat platforms (83.33%), followed by the "Shanghai University Stories" website (40.00%). Software and information technologies used in information dissemination included WeChat editors (Xiumi, 135, 96), web design languages (HTML, SQL), and image editing software (Photoshop).

The sum of all indicator scores was used as the total evaluation score for information awareness and information knowledge for the 54 respondents before and after participation. A K-S normality test on the difference between the

two datasets yielded P < 0.05, indicating non-normal distribution. Therefore, the Wilcoxon signed-rank test was used to examine differences before and after participation. As shown in , the results showed a Z-value of -4.507 and an asymptotic two-tailed P-value of 0.000 < 0.05, indicating statistically significant differences. That is, respondents showed significant differences in information awareness and information knowledge before and after participating in the "Memory of Shanghai University" project.

TABLE:9 Wilcoxon Signed-Rank Test for Information Awareness and Knowledge

Test Statistic	Asymptotic Significance (Two-Tailed)
Post-Pre	-4.507b 0.000

In summary, students' information awareness and information knowledge levels improved, with the highest improvement in understanding information methods and principles. In terms of information ability, students' information collection channels became more authoritative, they realized that information development should include authenticity appraisal in addition to content mining, and they used various information technologies such as WeChat editors and web design languages to disseminate information across multiple platforms. The "Memory of Shanghai University" project effectively developed students' information collection, development, and dissemination abilities, enhanced their information awareness, and enriched their information knowledge. Hypothesis H2 is supported.

4.3 Analysis of Interpersonal Communication Indicators

In the "Memory of Shanghai University" project, students were divided into several groups with similar numbers of members, responsible for different content. They communicated through online and offline channels, with WeChat and QQ text communication remaining the primary methods. Twenty-six students (48.15%) communicated at fixed times monthly, 17 (31.48%) communicated weekly, 2 (3.70%) reported daily on practice progress, and only 9 (16.67%) rarely communicated. Fifty students (92.59%) understood the majors and division of labor of group members and had basic cognition of group members. Three students reported conflicts with classmates during the "Memory of Shanghai University" project practice, but all actively sought solutions: 2 sought teacher help, 1 sought mediation from other classmates, and 1 chose to resolve it themselves, with all conflicts eventually being resolved. Ninety-four point four four percent of students got along well with team members, coordinated with each other, and experienced no conflicts. The existing data does not support hypothesis H3.

FIGURE:1 Communication Methods

4.4 Analysis of Ideological and Political Effects Indicators

C31-C36 (see) measure students' national sentiment. The pre-participation mean was 3.11, and the post-participation mean was 3.53, with 34 students (62.96%) showing increased scores. Before participating in the "Memory of Shanghai University" project, students had very low understanding of old Shanghai University's history and notable figures, but their understanding improved significantly after participation, with a change rate of 28.47%. Eighty-seven point zero four percent of students reported that through practice, they gained deeper understanding of the hardships of Chinese Communist Party members during the Anti-Japanese War, were moved by their fearless spirit, and consequently developed stronger love for the country, the Communist Party, the university, and the profession, expressed willingness to join the Party, learned from old Shanghai University figures' spirit, and hoped to use their professional knowledge to contribute to social memory projects.

TABLE:10 Pre- and Post-Participation Changes

Item	Pre-Participation Mean	Post-Participation Mean	Change Rate (%)
C31: Understanding of Party history	3.11	3.53	10.41
C32: Understanding of new China history	3.11	3.53	10.63

Item	Pre-Participation Mean	Post-Participation Mean	Change Rate (%)
C33: Understanding of reform and opening-up history	3.11	3.53	10.48
C34: Understanding of socialist development history	3.11	3.53	28.47
C35: Understanding of old Shanghai University history and notable figures	3.11	3.53	10.48

Item	Pre-Participation Mean	Post-Participation Mean	Change Rate (%)
C36: Understanding of socialist core values	3.65	3.93	10.48

C36 measures students' values. The pre-participation mean was 3.65, and the post-participation mean was 3.93, with 15 students (27.78%) showing increased scores. Students had basic understanding of Chinese socialist core values before participating in the "Memory of Shanghai University" project, but their understanding deepened further through practice. Students generally felt social progress, with 90.74% believing that socialist core values should guide university students, 81.48% reporting that they consequently had clearer future development plans, and 92.59% expressing willingness to serve socialist construction.

The sum of all indicator scores was used as the total ideological and political effects evaluation score for the 54 respondents before and after participation. A K-S normality test on the difference between the two datasets yielded $P < 0.05$, indicating non-normal distribution. Therefore, the Wilcoxon signed-rank test was used to examine differences before and after participation. As shown in , the results showed a Z-value of -4.758 and an asymptotic two-tailed P-value of $0.000 < 0.05$, indicating statistically significant differences. That is, respondents showed significant differences in ideological and political effects before and after participating in the "Memory of Shanghai University" project.

TABLE:11 Wilcoxon Signed-Rank Test for Ideological and Political Effects

Test Statistic	Asymptotic Significance (Two-Tailed)
Post-Pre	-4.758b 0.000

In summary, the "Memory of Shanghai University" project enhanced students' understanding of the "Four Histories" (Party history, new China history, reform and opening-up history, and socialist development history) and old Shanghai University's history and figures' stories, ignited students' love for the country,

the Communist Party, and the university, and guided students to establish correct values. Hypothesis H4 is supported.

4.5 Analysis of Interdisciplinary Learning Indicators

Among students participating in the "Memory of Shanghai University" project, 85.19% majored in archival science and 14.81% in information resource management. Of the 46 archival science students, 25 (54.53%) collaborated across disciplines with information resource management students, while 4 sought help from library science and computer science students in the School of Economics, and the rest collaborated only within their major.

In terms of interdisciplinary knowledge learning, as shown in , archival science students mainly learned information management knowledge, followed by computer science and library science knowledge, with a small portion learning information science knowledge.

TABLE:12 Interdisciplinary Learning by Archival Science Students

Discipline	Percentage
Information management knowledge	58.70%
Library science knowledge	23.91%
Computer science knowledge	28.26%
Information science knowledge	23.91%

Of the 8 information resource management students, 4 (50%) collaborated across disciplines with archival science students, and 1 (12.5%) sought help from communication majors. As shown in , information resource management students mainly learned archival science knowledge, with less acquisition of library science, computer science, and information science knowledge.

TABLE:13 Interdisciplinary Learning by Information Resource Management Students

Discipline	Percentage
Archival science knowledge	62.50%
Library science knowledge	25.00%
Computer science knowledge	25.00%
Information science knowledge	12.50%

In summary, although students' interdisciplinary learning scope was small and remained limited within the Department of Library, Information and Archives, archival science and information resource management students basically engaged in cross-disciplinary collaboration, learning relevant knowledge from archival science, information management, library science, computer science, and information science. Hypothesis H5 is supported.

4.6 Impact Scores for Secondary Indicators

The questionnaire surveyed participants' subjective perceptions of the impact of the "Memory of Shanghai University" project on each secondary indicator. According to the scoring table (), the top three indicators with highest impact were national sentiment, values, and professional identity, while the bottom three were interdisciplinary learning, interpersonal cognitive ability, and interpersonal coordination ability. The average impact score for all secondary indicators was 3.865. Impact scores for professional identity, information awareness, information knowledge, national sentiment, and values were above the average. This shows that the "Memory of Shanghai University" project had relatively high impact on students' professional and information literacy, with obvious ideological and political effects. Future efforts should strengthen cultivation of students' interpersonal communication skills and interdisciplinary learning.

TABLE:14 Secondary Indicator Scores

Secondary Indicator	Score
Interdisciplinary learning	3.45
Interpersonal cognitive ability	3.52
Interpersonal coordination ability	3.58
Professional knowledge	3.72
Information ability	3.75
Information awareness	3.88
Values	3.92
National sentiment	3.95
Professional identity	3.96

4.7 Summary

In summary, hypotheses H1, H2, H4, and H5 are supported, while H3 is not supported. That is, the "Memory of Shanghai University" project can improve students' professional and information literacy, has strong ideological and political effects, and can promote interdisciplinary learning to a certain extent.

5. Reflections on Archives Practice Teaching Models

5.1 Finding Entry Points for Archives Professional Practice

Archives practice teaching should identify entry points that align with students' interests. Conducting off-campus internships without clear purposes can only help students understand specific operations in certain aspects of archival work but cannot help them construct a reasonably structured practice system. Taking the "Memory of Shanghai University" project as an example, survey results show that while improving students' professional and information literacy, the project also demonstrated significant ideological and political effects, enhancing

students' understanding of the "Four Histories" and old Shanghai University's history, and guiding them to establish correct values. The project achieved these effects because it found an appropriate entry point for archives professional practice, constructing an archives practice teaching system based on archival professional knowledge, aiming to leverage archival memory value, using multimedia technology as tools, and employing archival retrieval and compilation as implementation means. Therefore, when designing their archives practice teaching models, universities should first identify appropriate entry points, then design specific project content, and construct a complete practice teaching system.

5.2 Strengthening Cooperation Depth Inside and Outside the University

The "Memory of Shanghai University" project was led by Shanghai University's Department of Library, Information and Archives, jointly completed with Shanghai University Archives, Student Affairs Office, Alumni Association, School of Computer Engineering and Science, Shanghai Municipal Archives, Shanghai Library, and other units, achieving deep cooperation inside and outside the university. In terms of intra-university cooperation, the Shanghai University Alumni Association Office has been collecting information and archives from descendants of old Shanghai University teachers and students since 2014, providing information support for the project. Shanghai University Archives preserves four fonds of Shanghai University and its predecessors, providing an on-campus practice location. The School of Computer Engineering and Science assisted in building databases, retrieval systems, and website design, providing computer technology support for archival science students. In terms of extra-university cooperation, Shanghai Municipal Archives and Shanghai Library preserve some old Shanghai University archives and contain rich old Shanghai University figure archives, providing off-campus practice locations. Additionally, the deputy director of Shanghai Library and associate researchers from Shanghai Municipal Archives participated in the project, providing practice assistance. Deep cooperation between different departments within the university and between the university and external institutions can provide more professional assistance, promote interdisciplinary communication, and expand practice teaching platforms.

5.3 Linking Professional Courses with Practice Teaching

First, professional courses can provide professional knowledge for archives practice teaching. Fundamental archival courses such as *Information Retrieval* and *Information Analysis* provide students with retrieval methods, channels, and knowledge for mining information. Core archival courses such as *Archives Management* and *Archival Document Compilation* teach students methods for archival arrangement, appraisal, and compilation of interview and biographical information. New media courses such as *Archival Website Analysis and Design*, *Database Principles and Applications*, and *Multimedia Technology* convey knowl-

edge about building databases, developing display systems, and disseminating information.

Second, archives practice teaching can help students deepen their memory of professional knowledge learned in courses and integrate relatively independent theoretical knowledge. In the existing curriculum system, different professional theory courses correspond to core competency cultivation in different business areas of archival work, offered by different teachers with different instructional designs and teaching resource constructions. Therefore, they "naturally" have insufficient horizontal connection and unclear collaborative relationships [10]. Survey results show that after participating in the "Memory of Shanghai University" project, students' professional knowledge levels significantly improved. Therefore, it can be inferred that archives practice teaching can establish connections between professional theories and between professional knowledge and specific problems, improving students' understanding of professional knowledge and their ability to connect theory with practice. Based on these two advantages, the experience of linking professional courses with practice teaching is worth promoting.

5.4 Incorporating Internet Information Technology Training

The information era requires archival science students to accumulate information knowledge, cultivate information awareness, and possess information processing capabilities. Survey results show that through the "Memory of Shanghai University" practice teaching, students' information awareness and knowledge levels improved, and their information retrieval, development, and dissemination abilities were developed. Before practice, students over-relied on search engines like Baidu and Bing and social platforms like Weibo, Zhihu, and Douban for retrieval. During practice, they utilized physical and online collections from archives and libraries, browsed archival and library websites, and read archival WeChat official account posts, making their information collection channels more authoritative. Additionally, because the project process required article layout and dissemination, students independently learned software such as WeChat editors, web design languages, and image editing. Incorporating segments requiring internet information technology in archives practice teaching is a requirement of the information era and helps promote students' independent learning of information technology and cultivate their information literacy.

5.5 Expanding Project Platforms to Enhance Interdisciplinary Levels

Survey results show that most participants in the "Memory of Shanghai University" project were archival science and information resource management students, still limited to the Department of Library, Information and Archives, with low interdisciplinary levels. Therefore, it is recommended to further expand the project platform, encourage students from all university departments interested in "Memory of Shanghai University" to participate, truly achieve joint practice among university students, strengthen project promotion using

audio-visual materials, posts, and posters in dynamic and static combinations to showcase project achievements and future design plans to all faculty and students, and release project member recruitment information on university-level platforms. After completing the "Memory of Shanghai University" platform within Shanghai University, consideration could be given to collaborating with archival science students from other universities for short-term project construction. Only by continuously expanding project platforms, conducting more long-term project design, and promoting collision and integration between different disciplines can the project be continuously injected with more vitality, promote vigorous development of the archival science major, and continue the archives practice teaching model of the "Memory of Shanghai University" project.

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Wang Xiangnü: Determined the paper's topic and structure, designed the framework, wrote and finalized the paper.

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Construction and Empirical Research on the Index System for Archives Practice Teaching Reform: A Case Study of "Memory of Shanghai University"

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Abstract: *[Purpose/Significance]* This paper aims to test the effect of the archives practice teaching project "Memory of Shanghai University" and provide experience and improvement measures for archives practice teaching reform in universities. *[Method/Process]* An index system for archives practice teaching was constructed from five aspects: professional quality, information quality, interpersonal communication, ideological and political effect, and interdisciplinary learning. SPSS 26.0 was used for questionnaire analysis to verify hypotheses. *[Result/Conclusion]* The "Memory of Shanghai University" project can improve students' professional and information literacy and has strong ideological and political effects. To a certain extent, it can promote students' interdisciplinary learning. Archives practice teaching can draw on the experience of "Memory of Shanghai University" by finding the breakthrough point of archives professional practice, strengthening the depth of cooperation inside and outside the school, linking professional courses and practice teaching, and expanding the project platform.

Keywords: archival science; practical teaching; index construction; Memory of Shanghai University

Note: Figure translations are in progress. See original paper for figures.