Analysis and Implications of Document Weeding Projects in Foreign University Libraries: Post-print

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Date: 2023-07-26T00:00:00+00:00

Abstract

[目的/意义] Library weeding is a crucial means for libraries to maintain collection vitality, expand collection space, and achieve diversified space repurposing and utilization. By analyzing and studying the practical methods and experiences of foreign university library weeding projects, this study aims to provide reference and ideas for the development of weeding initiatives in Chinese university libraries. [方法/过程] Taking 15 cases from the OCLC "Weeding Experiences" column over the recent five years (2013-2018) as research subjects, this study conducts an analysis across eight aspects: weeding methodology, personnel composition, workflow, targets and criteria, perspective and scope, focus areas, disposition of weeded resources, and project outcomes, thereby summarizing their characteristics and successful experiences. [结果/结论] University libraries undertaking weeding projects need to establish reasonable weeding criteria, project procedures, and methods; scientifically arrange personnel division of labor; maintain continuous communication with academic departments and encourage full faculty participation; fully consider resources of various carrier types; adopt a holistic perspective emphasizing resource coordination and sharing; consider cooperatively establishing channels for handling weeded materials; and establish a regular collection evaluation system.

Full Text

Analysis and Implications of Literature Weeding Projects in Foreign University Libraries

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Abstract

[**Purpose/Significance**] Literature weeding is a crucial means for libraries to maintain collection vitality, expand physical space, and enable diversified space repurposing. By analyzing and studying the practical methods and experiences of literature weeding projects in foreign university libraries, this paper aims to provide reference and insights for implementing weeding initiatives in Chinese university libraries. [**Method/Process**] This study examines 15 cases from the OCLC "Weeding Experience" column between 2013-2018, analyzing eight aspects: weeding methods, personnel composition, workflow, targets and criteria, strategic vision, priorities, disposal of weeded resources, and project outcomes. [**Result/Conclusion**] University libraries should establish reasonable weeding standards, project workflows, and methodologies; arrange personnel division of labor scientifically; maintain continuous communication with academic departments and encourage full faculty participation; fully consider resources of all carrier types; adopt a global perspective emphasizing resource coordination and sharing; consider establishing collaborative channels for processing weeded books; and build a normalized collection evaluation system.

Introduction

With the proliferation of online resources and search engines, libraries are losing their advantage in literature retrieval. User reading habits have shifted, resulting in fewer library visitors and declining print circulation rates, while a diversified pattern of information access has emerged. Simultaneously, libraries house numerous aging and outdated books that occupy limited physical space and create obstacles for users seeking relevant resources. Modern libraries must fulfill both preservation functions and space service roles, as students and faculty increasingly demand environments that support learning, collaboration, and group discussion. Weeding work directly saves collection space and facilitates library space repurposing, enriching service offerings.

The importance of weeding has long been recognized. As early as 1911, a New York library editorial advocated for "resolute and vigorous weeding policies." A century later, V.L. George emphasized that libraries need corresponding capabilities to undertake continuous evaluation and weeding—rather tedious tasks—to develop and maintain high-quality collections. Assessment and weeding are as important as initial collection development for building quality library holdings. Foreign research identifies numerous benefits of weeding, including space savings, improved user satisfaction, and increased efficiency. By removing damaged, outdated, duplicate, and rarely used items, libraries make it easier for users to locate needed resources, and regular weeding helps shape collections that meet user and institutional needs. However, weeding remains one of the least popular tasks in libraries. Foreign studies attribute this to: the perception that collection size reflects quality; staffing pressures that often postpone weeding tasks; public discomfort with discarding books; deep-rooted societal beliefs about the intrinsic value of print books and the necessity of collecting;

and difficulty standardizing weeding criteria, as differences may exist between what users actually read and what librarians consider most worth preserving.

Domestic scholars have also contributed to this field. Yang Hailing proposed a weeding indicator system comprising seven metrics, Liu Xia discussed principles and methods for literature weeding, while Liu Qing and Xu Na analyzed weeding projects at California State University, Fullerton and Wesleyan University respectively. Overall, domestic libraries show interest in weeding projects but limited research depth, focusing primarily on theoretical discussions rather than empirical studies. In contrast, despite acknowledging weeding as undesirable work, foreign university libraries have rich practical experience and research to adapt to changing times and meet user demands. OCLC, the world's largest information service provider, regularly publishes industry development reports that effectively capture and influence trends. Since 2002, OCLC has maintained a dedicated "Weeding Experience" column that introduces successful weeding cases from foreign university libraries, providing relevant papers and presentations to guide library weeding efforts. Currently, no research combines multiple weeding cases longitudinally for horizontal analysis and synthesis covering methods, personnel, workflow, targets, standards, vision, priorities, outcomes, and resource disposal. Based on the principle that weeding must consider the broader resource environment and timeliness, this paper selects 15 cases from the OCLC column (2013-2018) for multi-faceted analysis, summarizing characteristics and successful experiences to provide reference for Chinese university libraries.

2. Analysis of Literature Weeding Projects in Foreign University Libraries

2.1 Weeding Methods **2.1.1 Based on Data Analysis Tools** Rollins College's Olin Library in Winter Park, Florida, with over 285,000 print volumes, uses the commercial decision-support tool Sustainable Collections Services (SCS) for print weeding decisions. SCS integrates circulation and holdings data from WorldCat, HathiTrust, and other sources. Using this tool, librarians obtain data support beyond circulation statistics. SCS establishes six retention and weeding criteria; books must meet all criteria to be considered for weeding. Candidate titles are flagged for further review by librarians, faculty, students, and other academic community members. Olin Library weeded over 20,000 volumes in two years, approximately 7% of its total collection.

Similarly, Western Carolina University Library uses the Bowker Book Analysis System to generate lists that can be matched by classification number with lists from library service systems, comparing holdings with other university libraries.

2.1.2 Based on Library System Data Most libraries extract relevant data from their management systems, then consider multiple factors including discipline, circulation data, copy quantity, publication date, content condition, weeding quantity, and space requirements, while fully soliciting and incorporat-

ing faculty opinions. This process also provides an opportunity to review the library's collection systematically.

2.1.3 Engaging Professional Book Data Companies or Survey Agencies Wesleyan University Library engaged a professional book data company responsible for data extraction and post-processing of weeded books. California State University, Fullerton Library introduced a third-party survey agency, using GreenGlass to establish a survey system for pre-weeding title investigation, giving departments 30 days to select materials they wished to retain from the preliminary weeding list.

Overall, utilizing data and analysis results represents consensus and foundation for foreign libraries' weeding projects.

2.2 Weeding Personnel 2.2.1 Independent Completion by In-house Staff Most libraries establish a dedicated weeding team comprising library leadership and department heads from circulation, cataloging, reference, and technical services, plus subject librarians and acquisition librarians responsible for overall weeding operations.

2.2.2 External Personnel Concordia University Library hired three temporary staff to assist with weeding due to retirements among regular employees. Wesleyan University Library engaged two business specialists specifically responsible for reviewing weeding lists and book removal. California State University, Fullerton Library hired specialized data analysts to analyze recovered user survey data and handle post-processing.

In summary, foreign libraries' weeding project participants demonstrate diversified knowledge, positions, and sources. Adequate staffing and multi-faceted expertise support smooth project implementation.

2.3 Weeding Workflow The 15 cases varied in focus—some detailed workflow while others emphasized standard-setting processes. Based on these cases, we summarize the common workflow for foreign university library weeding projects.

2.3.1 Establishing Weeding Standards and Communicating Fully with Faculty and Students After determining the weeding plan, libraries submit it to faculty senate library committees for review while communicating with departments and students through multiple online and offline channels, providing bibliographic lists. Based on these lists, faculty and students can request retention of specific titles with justification. Some libraries mark candidate weeding books so that users can make designated marks if they wish to retain certain items.

2.3.2 Re-evaluation by Librarians and Faculty with Retention of Some Materials Libraries generally allow departments and students time for consideration, maintaining continuous communication about their feedback. Based

on faculty input, new lists are created for department head review to finalize resources for retention and weeding.

2.3.3 System Operations For print books, staff scan barcodes of weeded titles and upload them in batches to the library management system for item deletion. For e-books, bibliographic records are deleted from the management system while corresponding titles are hidden in the vendor's backend (making them unsearchable by users).

2.3.4 Physical Removal and Packing Weeded resources are removed from shelves and packed for further processing.

2.3.5 Post-weeding Activities Due to successful project outcomes, some university libraries consider updating collection development policies post-weeding to incorporate weeding as a regular, ongoing activity.

2.4 Weeding Targets and Standards Generally, university libraries focus weeding on print resources, primarily books and journals. However, with growing e-resources and refined management, some institutions have begun weeding e-books.

2.4.1 Print Resources

(1) Monographs and Journals Concordia University in Montreal, Quebec, is a comprehensive university with over 27,000 students (86% undergraduates) and more than 1,800 full-time and part-time faculty. It operates two campuses with two libraries: the Webster Library downtown and the smaller Vanier Library at the Loyola campus. This university conducted distinctive weeding across multiple print resource types.

For print journals, Concordia launched a weeding project in 2011 that included canceling duplicate subscriptions between the two libraries and weeding back issues with electronic versions available through permanent access rights. Webster Library retained only the most recent five years of journals, while Vanier Library moved older issues to compact storage.

For monographs, weeding criteria included: books published 1950-2000 with fewer than 15 checkouts since 1992 (multiple copies under one bibliographic record were considered duplicates); print copies with permanently accessible electronic versions; older or superseded editions with low or no usage; and selective elimination of never-used, outdated materials that no longer support disciplinary development or research. Humanities and social sciences faculty expressed concerns about the last criterion, insisting it must be scope-limited and reviewed jointly by faculty and librarians.

Olin Library's weeding criteria required books to have been accessioned before 1996 with no internal use or circulation since then; held by over 100 libraries in WorldCat; held by both the University of Florida and Florida State University; not about Florida; and not essential reference titles. These detailed, professional

criteria ensure retention of core titles while guaranteeing that weeded books remain available through interlibrary loan. Additionally, Olin Library used SCS to generate a retention list for titles held by fewer than ten libraries nationwide, adding retention notes to bibliographic records and physical markings to inform future weeding decisions.

Pittsburgh Theological Seminary, established in 1794, operates America's largest theological library. After thorough staff communication and considering research needs, holdings quantity and quality, electronic availability in other databases, national holdings, HathiTrust archiving, and subject matter, the seminary weeded JSTOR electronic journal backfiles, some current print journals with electronic versions, and some JSTOR backfiles without electronic versions. Print resources without electronic versions, frequently used materials, rare Montreal-area holdings, or titles committed for retention within the Quebec university consortium were retained. Ultimately, 60% of this portion was weeded, with some popular series moved to reference areas and older, fragile materials transferred to special collections.

(2) Reference Books Concordia University's reference book evaluation differed from monograph assessment, aiming to eliminate duplicates and outdated materials while consolidating identical series across both libraries. Librarians comprehensively considered circulation data, online versions, and faculty/student needs, canceling 60 standing orders and weeding 28,000 reference volumes (primarily indexes and statistical tools), saving 60% of space.

Pittsburgh Theological Seminary's reference collection comprised three parts: North American and European religious directories and yearbooks (mostly canceled due to online availability, retaining only current major titles); the Library of Congress Z classification (books on library history, library science, bibliography, library catalogs, and publishing directories—retained due to faculty opposition and moved from in-library use to circulating status); and general reference works in philosophy, theology, biblical studies, practical theology, and Christian history. Without circulation or shelving data for reference books, the library relied on staff observation and usage knowledge, considering factors such as outdated content, electronic availability, low usage, discipline, and quantity of similar titles. Post-weeding, reference holdings were reduced by 2,500 volumes, with key resources placed in prominent locations, improving utilization and user satisfaction.

(3) Government Publications and Microforms Concordia University Library has long served as an archive for Canadian federal English documents and some Quebec official publications. Mostly uncatalogued, these were accessed through card indexes. As government documents increasingly became available online and older materials were digitized, with federal and provincial archives nearby, the library decided to weed these collections. Criteria included: documents with online electronic versions; outdated or obsolete documents; holdings available in nearby libraries; incomplete or damaged files. Print resources without electronic versions, frequently used items, rare Montreal-area holdings, or

titles committed for retention within the Quebec university consortium were preserved.

In 2014, Webster and Vanier Libraries' microfilm, microfiche, and microcard collections occupied over 150 cabinets. Weeding criteria included eliminating duplicate content between libraries and materials available in the ERIC database, saving 40% of space.

2.4.2 Electronic Resources An American Library Association survey found that 96% of libraries lacked explicit e-book weeding procedures. Louisiana State University Library's e-book weeding project attempted to remove outdated e-books in health and information technology, presenting different challenges from print weeding.

Between 2001-2007, Louisiana State University Library purchased over 52,000 e-books from OCLC's NetLibrary database (an early e-book collection acquired by EBSCO in 2010 and renamed EBSCO eBook Collection), including health science titles from the same authors and publishers. All bibliographic information was batch-imported into the library management system. Librarians discovered these health science e-books were generated by computer algorithms using materials from public and government-funded websites, created by 6-7 programmers using 60-70 computers following similar templates. After implementing a discovery system in 2012, these books appeared at the top of search results due to repetitive keywords and phrases, though many URLs had become invalid, affecting retrieval efficiency. After careful content comparison and deliberation, the library decided to remove these e-books from the collection. Following communication with EBSCO, the library created an exclusion list for vendor backend processing, removing these titles from search results.

This demonstrates that foreign libraries' weeding resource types continue to expand. With e-resource development and growth, weeding has extended beyond traditional print resources to electronic resources, ensuring overall collection vitality and dynamic development.

2.5 Coordination Scope for Weeded Resources During weeding, libraries consider duplicate quantities of candidate resources, aiming to streamline collections while ensuring continued access through interlibrary loan. University libraries typically consider coordination at several levels: national, state, local consortium, and within the institution. For example, Concordia University retained one copy at Vanier Library if both branches held duplicates.

2.6 Weeding Priorities Case studies reveal that each library prioritizes retention of resources committed for preservation within alliances or cooperative library agreements. Each library's preservation responsibilities differ, enabling mutual coordination that provides greater weeding flexibility and enhances the significance of resource sharing.

2.7 Disposal of Weeded Materials Libraries prefer diversified processing methods to maximize continued value and optimize resource utilization benefits.

2.7.1 Departmental Selection or Donation to Other Libraries Materials may be selected for retention by departments and faculty or donated to public or research institution libraries to maintain their useful life.

2.7.2 Sale Through Non-profit Book Dealers Weeded books may be sent to Better World Books, a U.S.-based non-profit book dealer that supports global book donations, information literacy training, and library activities through a network of over 2,300 college campuses and partnerships with more than 3,000 libraries nationwide. Besides selling new books, Better World Books collects used books and textbooks, converting over 117 million books into more than $15 million for literacy and education funding.

2.7.3 Sale Through Designated Agencies Weeded books may be assigned to B-Logistics, an agency specializing in processing weeded books for libraries and other institutions, with proceeds primarily funding library resource development.

2.7.4 Campus Book Sales Some libraries participate in campus book sales, enabling secondary circulation while allowing faculty and students to purchase discounted books.

2.8 Project Outcomes **2.8.1 Weeding Effectiveness** Libraries generally consider weeding effective and meaningful, laying a foundation for continuous collection renewal. Weeding also provides an opportunity to review collections, verify holdings, and revise bibliographic records in library service systems.

2.8.2 Discovery of Rare and Valuable Materials During weeding, libraries typically invite experts and professional librarians to evaluate older materials to avoid accidentally discarding valuable or rare items. This process becomes an important discovery mechanism for special collections. Through re-evaluation and diversified processing, valuable and distinctive materials are retained.

2.8.3 Enhanced Collaboration with Faculty Increased communication during weeding projects yields positive faculty feedback on reasonable and clear retention standards. Post-implementation, library-faculty collaboration strengthens, with greater faculty engagement in resource development.

Foreign university library weeding projects are complex but yield positive results, reflecting the importance of maintaining dynamic, circulating collections for overall library development. Representative foreign university library weeding projects are summarized in Table 1 .

Analysis reveals both commonalities and particularities across projects, attributable to five main factors: (1) varying target quantities, with larger-scale projects requiring data analysis tools and third-party companies; (2) different funding levels affecting overall planning; (3) different staffing levels, necessi-

tating external personnel in some cases; (4) different institutional roles, with each library prioritizing retention of resources committed for preservation in cooperative agreements; and (5) different levels of pre-project consideration, leading to specific methodological differences. For example, Olin Library's use of SCS to generate retention lists for titles held by fewer than ten libraries nationwide demonstrates long-term, comprehensive planning.

3. Implications for Chinese Libraries

Through literature review and professional communication, we find few weeding practice cases in Chinese libraries in recent years. A CNKI search for titles containing "weeding" between 2013-2019 yielded 49 articles, with only one documenting a weeding practice project at Liaoning University of International Business and Economics, while others remained theoretical discussions. As Yu Chunyan noted, theoretical research predominates while empirical studies are scarce, lacking successful practical examples. Additionally, research rarely addresses unified coordination, system support, or foreign project experiences, making it difficult to provide good references for Chinese libraries. Based on the above case analysis, we propose the following feasible recommendations.

3.1 Establish Reasonable Weeding Standards, Processes, and Methods First, determine weeding methods, potentially leveraging third-party statistical tools for more comprehensive data support beyond local circulation and holdings data, including regional collection data to strengthen weeding decisions. Second, weeding standards must fully consider project objectives, guiding comprehensive collection analysis to identify optimal weeding targets while considering whether open-access or other shared digital collections include candidate materials. If online versions are available, print weeding faces less resistance. Finally, establish workflows including data extraction and analysis; communication timing, frequency, and methods with faculty and students; intention surveys and title review through survey systems or third-party platforms; and re-evaluation of candidate titles with expert identification of rare materials. Workflow design must be tailored to institutional circumstances, with different priorities and sequences requiring thorough understanding of project requirements combined with local conditions for smooth implementation.

3.2 Arrange Personnel and Division of Labor Scientifically Establishing a dedicated team is crucial. Drawing from foreign experience, teams should include in-house department heads, subject librarians, and acquisition librarians. Since weeding projects require extensive data collection, processing, analysis, communication with faculty and students, feedback collection, and physical removal, libraries must assess whether sufficient staff are available and competent for these tasks. Engaging external personnel and professional companies for support represents a viable option that can advance projects without disrupting regular operations. Additionally, specialists in special collections or archives

should be invited for re-evaluation of candidate titles to prevent accidental removal of historically important materials.

3.3 Maintain Continuous Communication with Departments and Encourage Full Faculty Participation Faculty participation is a key success factor. Libraries typically engage faculty through: (1) blogs, BBS, Twitter, and other social media platforms announcing project plans and standards while providing Excel lists of candidate titles for faculty feedback; (2) discussion meetings for full communication with departments; (3) survey system platforms for comprehensive feedback; and (4) faculty senate library committees that review weeding proposals. Sufficient communication and exchange are essential for gaining faculty trust and support. Foreign experience demonstrates that survey systems and face-to-face communication both facilitate weeding work.

3.4 Diversify Weeded Material Formats Case analysis reveals that foreign libraries' weeding targets have diversified beyond traditional print resources to include electronic resources. Since the early 1990s, libraries have introduced e-resources, gradually shifting from bulk purchasing to refined acquisition models such as demand-driven and evidence-based acquisition. With next-generation library service platforms enabling refined e-resource management, Chinese libraries adopting these systems will inevitably face similar issues of outdated content, poor quality, and duplication. For example, many Chinese university libraries acquired the NetLibrary e-book collection through the DRAA consortium and can reference foreign experience to ensure good user experiences.

3.5 Adopt a Global Perspective with Coordinated, Collaborative Resource Sharing Foreign university libraries consider duplicate holdings within certain scopes when establishing weeding criteria to fulfill preservation responsibilities. In a consortium where each library has different resource commitments, retention priorities vary accordingly. Libraries typically consider national, state, or consortium-wide duplicate quantities, retaining scarce resources and weeding widely-held titles. Weeding is not simple reduction but coordinated collection management. Chinese libraries should prepare comprehensive data, emphasize resource cooperation and sharing, and support smooth weeding implementation while ensuring continued access.

3.6 Establish Collaborative Processing Channels for Weeded Books A major factor affecting Chinese libraries' weeding work concerns negative impacts of books bearing library stamps entering the resale market. Following foreign practices, third-party organizations or library consortia could establish non-profit entities similar to Better World Books to handle weeded books, converting proceeds into literacy and education funds. Such mechanisms would alleviate libraries' concerns about weeded book disposal.

3.7 Establish a Normalized Collection Evaluation System Literature review reveals that nearly all university libraries hesitate and worry about weeding, considering it among the least desirable tasks due to concerns about collection reduction, unclear standards, and external perceptions. However, post-project, virtually all libraries consider weeding highly effective, providing good collection review, streamlining holdings, and increasing vitality. Faculty and students provide positive feedback, and library-department communication improves, demonstrating service and resource support functions. Most importantly, libraries that have completed weeding projects agree it should continue as a regular activity incorporated into collection development policies. Establishing a normalized collection evaluation system and continuous assessment is essential for standardizing and optimizing collections, rationalizing budget allocation, developing distinctive resources, and improving utilization and impact. The library community must commit to building a comprehensive evaluation system for traditional, digital, and overall resource structures. Weeding is a means, not an end—the goal is to maintain collection vitality and competitiveness.

Conclusion

University library weeding projects require comprehensive consideration and full communication. They help maintain collection vitality and provide diverse space services. Foreign success stories demonstrate that despite challenges, weeding is achievable with accurate data support, faculty engagement, appropriate standards, and detailed operational procedures. The implementation background and outcomes of foreign projects show that establishing a normalized collection evaluation system is essential for standardizing collection management, rationalizing budget allocation, developing distinctive collections, and improving utilization and impact.

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Received: 2019-05-28 **Revised:** 2019-09-17 **Pages:** 127-135 **Responsible Editor:** Wang Chuanqing

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