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Research Article

Navigating the Future: A Survey of Curriculum Materials Centers and Collections in U.S. Academic Libraries

Part 1: Information Literacy, Technology, and Collaborations

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Abstract

Curriculum Materials Centers (CMCs) play a vital role in supporting teacher education programs by providing instructional materials, educational technologies, and professional development resources. However, despite their importance, CMCs remain an underexplored area of academic research; specifically, there is a lack of quantitative assessment of CMCs' practices. This study employs an exploratory survey design to examine trends in curriculum materials centers and collections within U.S. academic libraries, focusing on information literacy instruction, instructional formats, technology integration, and faculty collaboration. Findings indicate that CMC librarians and education liaison librarians are actively engaged in information literacy instruction, particularly for undergraduate and master's students, typically through in-person sessions. Differences across institution sizes were observed in access to educational technologies, use of instructional formats, and collaboration between librarians and education faculty. Respondents reported only partial alignment between CMC technologies and PreK–12 classroom practices, and larger institutions were more likely to provide dedicated technological infrastructure and more frequent, targeted instructional sessions. Although many respondents described collaboration with education faculty, perceptions of equal partnership were mixed. This study contributes to understanding CMCs' evolving roles and underscores the need for strategic adaptation to enhance their continued relevance in teacher education programs. The article represents Part One of a two-part analysis, reporting on the structural and demographic aspects of CMCs, information literacy, technology, and collaborations.

Keywords: CMCs, curriculum materials centers, education libraries, survey, educational technology, information literacy, teacher education programs

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Introduction

Curriculum Materials Centers (CMCs) are critical hubs within academic libraries, providing specialized resources and services supporting pre-service and in-service teacher education programs. These centers are essential in preparing future educators by offering access to P-12 instructional materials, educational technologies, and professional development resources. Historically, CMCs emerged in the context of the early 20th-century progressive education movement, which emphasized hands-on and experiential approaches to teacher preparation. Over time, CMCs have evolved, incorporating new technologies, digital resources, manipulatives, and multimedia tools to align with changing instructional practices and pedagogical standards. Despite their continued relevance, CMCs face significant challenges in today's educational landscape, including adapting to digital learning environments, responding to evolving information literacy needs, and addressing declining enrollment in teacher education programs. (Kraft & Lyon, 2024).

Recent research has emphasized the need for academic libraries to evolve alongside emerging educational technologies (Calvert et al., 2020; Kang & Sinn, 2024; Lo, 2024), changes in instructional modalities (Chaudhuri & Terrones, 2025; Garner et al., 2024; Lierman et al., 2022; Peacock, 2025), and shifting student expectations in teacher preparation programs (Booker et al., 2024; Christian et al., 2024; Kraft & Lyon, 2024).While prior studies have explored CMC services through case studies or regional analyses, there remains a noticeable lack of broad, quantitative research examining how CMCs function across institutions. This research gap is particularly significant given the increasing demands for digital literacy, the integration of educational technology, and the accessibility of resources in modern teacher preparation programs.

In response to this gap, we designed an exploratory survey to gather data from academic librarians responsible for curriculum materials centers or collections in U.S. academic libraries. Our aim was to better understand how CMCs are responding to key instructional and technological changes in teacher education. The survey, conducted in Spring 2024, received 40 fully completed responses from a pool of 104 contacts, representing a 40% response rate. Participants included both CMC librarians, who oversee dedicated curriculum centers, and education liaison librarians, whose responsibilities include managing curriculum collections as part of broader subject liaison roles.

This paper is the first of two publications based on survey findings. It focuses on three core areas: (1) information literacy instruction and digital content creation; (2) educational technology integration and access; and (3) collaborations between librarians, education faculty, and students. A second article will address cooperative collection development, OER, and long-term challenges facing CMCs.

Our first article addresses the following research questions:

1. How is information literacy supported among education students, and what instructional strategies are used most frequently?
2. How do librarians integrate digital and educational technology tools into CMCs' spaces and services?
3. How do CMCs collaborate with education faculty, other departments, and external organizations to enhance their services and resources?

This analysis should help academic librarians, library administrators, and education faculty to better understand current trends, opportunities, and challenges in supporting teacher education programs. The paper's contribution lies in offering a national snapshot of how CMCs are evolving in response to institutional and pedagogical shifts, grounded in original survey data that complements existing case-based literature. While this study provides valuable insights, its scope is limited by the modest sample size and exploratory nature of the design; therefore, findings should be interpreted with appropriate caution.

Literature review

Throughout their history, Curriculum Materials Centers (CMCs) have played a vital role in shaping educational practices by providing instructional resources, fostering innovation in teaching, and supporting the professional growth of educators and preservice teachers. Their development was influenced by the progressive education movement of the early 20th century, led by visionaries such as John Dewey, which spurred the establishment and expansion of CMCs across the United States. As noted by Alteri (2012), Beile (2012), and Donaldson et al. (2022), this foundational period shaped the mission and structure of curriculum materials centers, ensuring their integration into teacher preparation programs and CMCs' continued evolution.

The progressive education movement emphasized experiential learning, cooperative projects, and diverse instructional resources as alternatives to traditional textbooks (Alteri, 2012; Beile, 2012; Donaldson et al., 2022). With the rise of student-centered pedagogies, teacher education programs flourished in early teacher-training institutions and teachers' colleges, increasing the demand for dedicated spaces where preservice teachers could explore educational materials (Alteri, 2012). In response to this growing demand, CMCs expanded nationwide as universities increasingly recognized their role in preservice and in-service teacher training. Technological advancements also played a critical role in shaping CMC collections, integrating films, slides, and multimedia tools to support innovative teaching strategies. However, by the late 20th century, many CMCs underwent significant transformations. According to Alteri (2012), some evolved into comprehensive learning resource centers, housing print materials, manipulatives, educational software, and multimedia equipment. Conversely, others were closed or absorbed into main library collections due to shifting institutional priorities and budget constraints. This shift reflected broader trends in academic libraries, where centralized resources became increasingly preferred over specialized facilities.

The *Directory of Curriculum Materials Centers and Collections* (8th ed.) (Kogut et al., 2023) is a key source of descriptive statistics on CMCs and their collections. Though not exhaustive, it provides self-reported data from 112 U.S. and Canadian colleges and universities. When considered alongside research articles, case studies, and other scholarly literature, the directory contributes to a more comprehensive understanding of CMCs in academic libraries by offering a quantitative context that complements qualitative research. The geographic distribution data indicates that CMCs and curriculum materials collections are present across multiple states and provinces, though concentrations vary significantly, ranging from 0 to 13 centers per state. Additionally, curriculum materials collections are housed within a broad spectrum of institutions, including major state universities, smaller liberal arts colleges, and public

and private institutions. The fact that 72 CMCs (Kogut et al., 2023, p. 197) are now integrated into main libraries underscores a broader trend toward consolidation and resource centralization. CMC resources reflect both traditional strengths and adaptations to modern educational needs. Print materials remain central, with print textbooks and children's/young adult literature being the most widely held resources (in 104 and 103 institutions, respectively). Financial support for CMCs varies widely, with annual budgets ranging from less than $1,000 to over $30,000. Despite financial constraints, many centers maintain extensive operating hours, with a substantial number open for more than 90 hours per week, often with limited professional staffing. This disparity in funding and staffing underscores CMCs' challenges in maintaining robust collections and services.

Examining historical trends further highlights significant changes in CMC operations. A comparison between the 7th edition (Gregor et al., 2015) and the 8th edition (Kogut et al., 2023) of the *Directory of Curriculum Materials Centers and Collections* reveals a steady shift toward centralization. Reported increases in professional staffing levels and service hours suggest that CMCs are being restructured within main libraries rather than eliminated. As standalone CMCs decrease, main libraries absorb their functions, often redistributing responsibilities among existing library personnel rather than hiring dedicated CMC staff.

The current record low of 112 CMCs reported in the Directory of Curriculum Materials Centers and Collections (8th ed.) (Kogut et al., 2023) reflects a long-term decline already evident in the early 2010s. Kohrman (2015) provided an early warning of this transformation in their state-level analysis of Michigan curriculum materials centers, documenting significant structural changes driven by technological, pedagogical, and budgetary challenges. The author found that 80% of centers cited budget constraints as a primary reason for closure or service reduction. In addition to financial limitations, space constraints played a key role, with 80% of centers that underwent changes citing the need to reallocate space for other purposes. Many CMCs significantly reduced their square footage, relocated collections to main libraries, or closed their physical facilities altogether. Among the 26 CMCs surveyed, 62% remained static with no significant changes, 27% either closed entirely or were in the process of closing, 15% drastically reduced their collections and space, and 23% relocated collections to main libraries. Staffing challenges further compounded these issues. The survey indicated that 40% of CMCs cited staffing costs as a significant concern, with many centers experiencing staff reduction and operating with minimal support staff. Additionally, 20% of CMCs identified low usage as contributing to operational changes. With decreased student and faculty engagement, some centers struggled to justify their existence within the broader institutional framework. To address these concerns, Kohrman suggested that CMCs adapt to changing educational needs and embrace technology integration to survive and remain relevant. Creative solutions, such as resource sharing and partnerships with other institutions or departments, were also suggested to address these challenges. Kohrman emphasized transformation and adaptation as key to CMCs' continued relevance and sustainability, especially as higher education evolved, and institutional resources remained constrained.

Today's Curriculum Materials Center (CMC) librarians must be well-versed in interdisciplinary standards integrating library science, education, and technology. *The*

Companion Document to the ACRL Framework for Information Literacy for Higher Education: Instruction for Educators (ACRL/EBSS Instruction for Educators Committee, 2023) outlines three key roles that information literacy plays in teacher education: (1) supporting teacher education students' coursework, (2) preparing teachers with research skills for their careers, and (3) equipping teachers to support the information needs and practices of their students. This framework provides essential competencies for teacher education students, aligning with standards such as those from the International Society for Technology in Education (ISTE) (International Society for Technology in Education, 2024) and the Interstate Teacher Assessment and Support Consortium (Council of Chief State School Officers, 2013). Additionally, awareness of accreditation standards, such as those established by the Council for the Accreditation of Educator Preparation (CAEP), enables CMC librarians to design targeted instructional sessions that support accreditation requirements and evidence-based learning practices (CAEP, 2023). By maintaining this multidisciplinary approach, CMC librarians are essential partners in the educational ecosystem, contributing significantly to the development of information-literate and technologically competent educators.

Farthing and Gregor (2012) noted that CMC librarians face two key challenges: introducing students and faculty to the resources available in Curriculum Materials Centers and creating opportunities to provide instruction in information literacy competencies. While digital technologies and databases have increased access to information, preservice teachers still require strong information literacy skills to evaluate, understand, and apply these resources effectively. These skills are essential for their teaching careers and for preparing their students to be information literate. Farthing and Gregor emphasized that collaboration with education faculty was critical for integrating information literacy instruction and introducing preservice teachers to CMC resources and services. Yoder and Scott (2012) further stressed that robust faculty-librarian partnerships are essential for CMC librarians to remain vital to their institutions. They argued that librarians must go beyond merely providing resources and actively participate in teacher education programs, shaping students' information literacy development.

In a more recent survey study, Donaldson et al. (2022) found that collaboration and information literacy instruction were key components of education librarianship. They discussed collaborative approaches to teaching information literacy, including standalone modules, integrated instruction throughout teacher education programs, and faculty-librarian partnerships grounded in ACRL standards. Donaldson et al. reinforced the importance of helping future teachers develop their information literacy skills and how to teach these skills to their future students. Their research findings highlighted significant concerns about information literacy among teacher education students, showing that many had insufficient information literacy skills and often overestimated their abilities. This was particularly concerning given their future role in teaching these skills to their students. Donaldson et al. found that some institutions implemented mandatory instruction through faculty-librarian collaboration to address these issues.

The Donaldson et al. (2022) survey revealed that nearly two-thirds of education faculty collaborated on information literacy instruction with librarians. Challenges centered around some faculty believing they could teach information literacy as well as or better than librarians, requiring librarians to demonstrate their value and the value of information literacy. The most common types of instruction were on: the use of library

resources (99% of respondents), evaluating information (88%), citation management tools (68%), and use of specialized collections (60%). Other barriers to effective implementation of information literacy instruction included limited class time due to accreditation requirements, a focus on teaching certification exams, and time constraints for faculty and librarians. Donaldson et al. found that many education librarians (88%), including those managing CMCs, were overextended, with increased responsibilities resulting from reduced staff positions. Institutional support was another critical challenge, with 49% of respondents citing a lack of faculty buy-in as a significant concern. Internal (33%) and external (23%) bureaucracy created additional obstacles, with some institutions using declining enrollment in teacher education programs as justification for reducing support. Despite these ongoing challenges, Donalson et al. emphasized that continued collaboration between faculty and librarians is crucial to ensuring effective information literacy instruction. They concluded that while multiple successful instructional models exist, the most successful approaches were those tailored to the specific contexts and needs of the institution and program (Donalson et al., 2022).

While information literacy instruction remains a core area of collaboration between curriculum materials centers (CMCs) and education faculty, innovative partnerships can extend beyond traditional library instruction to include space redesign, collection development, community engagement, and experiential learning opportunities for preservice teachers. A case study at Rhode Island College demonstrated the impact of such expanded collaboration (Ayton & Capraro, 2021). In 2019, a liaison librarian for the School of Education partnered with a professor in the Elementary Education Department, allowing preservice teachers to "lead the charge" in transforming the Curriculum Resource Center (CRC). Students designed interactive displays using a project-based learning methodology, reorganized the physical layout, and updated collections to align with 21st-century learning needs. This initiative provided preservice teachers with real-world experience while fundamentally transforming the CRC's space and collections. The project also enhanced connections with local schools through elementary students' artwork displayed in the renovated space. The collaboration resulted in multiple benefits, including increased faculty engagement with the CRC, improved collection relevance and usage, and integration of student perspectives in decision-making processes. More importantly, it demonstrated how engaging education students as active participants rather than passive users can revitalize curriculum materials centers for modern educational needs (Ayton & Capraro, 2021).

Similarly, the Curriculum Collection at Pennsylvania State University underwent a collaborative revitalization effort that involved librarians, faculty, and students in modernizing the center (Correll & Bornstein, 2018). This initiative included creating collaborative workspaces, updating technology, and developing new partnerships to enhance the CRC's offerings. The collaboration resulted in multiple benefits, including greater faculty engagement with the CRC, enhanced collection relevance and usage, and incorporation of student perspectives into decision-making processes. More importantly, this case study demonstrated that treating education students as active participants rather than passive resource users can rejuvenate curriculum materials centers for modern educational needs (Correll & Bornstein, 2018).

Like collaboration, outreach initiatives are crucial in introducing preservice teachers, education faculty, and the broader campus community to the resources and

services of Curriculum Materials Centers (CMCs). Walker (2012) outlined strategies for developing successful outreach programs to enhance CMC visibility within academic communities. Effective outreach initiatives included workshops, exhibitions, and interactive events highlighting CMC resources and services. Additionally, Walker emphasized the importance of collaborating with campus organizations, student groups, and community partners to maximize outreach efforts. They recommended leveraging social media and digital platforms to promote CMC offerings and effectively engage target audiences (walker, 2012). Vanderwerff and Herscovitch (2021) provided further insights into the expanding role of CMCs. Their research found that while physical proximity influenced student usage, students across multiple disciplines perceived curriculum collections as valuable academic resources, demonstrating their potential to serve a broader user base beyond education students.

Educational technology instruction is closely connected to information literacy as both emphasize analytical thinking, problem-solving, and the creation of new knowledge. Research consistently indicates that many preservice teachers lack experience and confidence in effectively integrating educational technology (Chen, 2010; Crompton, 2023; Ebersole, 2019; Kramarski, 2015; Nelson et al., 2019; Winter et al., 2021). As early as 2012, library professionals such as Jo Ann Carr recognized the critical role of technology integration in Curriculum Materials Centers (CMCs). Carr (2012) argued that CMCs must evolve beyond traditional resource centers to become dynamic spaces where preservice teachers develop digital literacy and technology skills. They predicted that future CMCs would need to support emerging teaching technologies, facilitate digital age learning environments, and provide hands-on experience with educational technology tools. They also emphasized the need for technology-savvy librarians to work closely with faculty, ensuring that students effectively navigate both physical and digital learning environments. Carr also recognized several obstacles to implementation, including limited resources, gaps in staff technological expertise, infrastructure constraints, and unequal access to technology. Nevertheless, they noted that with strategic planning and collaborative partnerships, CMCs could successfully evolve to prepare technologically competent educators equipped to meet modern classroom demands (Carr, 2012).

At Albion College's Ferguson Center, education students were supported in mastering practical teaching technologies, including iPads and Swivl devices for creating flipped classroom lessons, developing educational websites and WebQuests, working with interactive whiteboards, and creating professional e-portfolios (Kohrman, 2015). Kohrman also highlighted Oakland University's Educational Resources Lab as an example of a comprehensive approach to technology integration. This lab collaborated with local school districts, worked closely with education faculty in methods courses, and supported students in their field placements by incorporating technology into lesson planning. Kohrman recommended that CMC librarians stay up to date on P-12 educational technologies, evaluate educational apps, understand and apply ISTE Standards, and assist preservice teachers in selecting and integrating appropriate technologies into lesson planning. Walker (2001, as cited in Kohrman, 2015) emphasized that CMC personnel who effectively guide education students in implementing educational technology play a crucial role in ensuring that preservice teachers and their future students develop essential instructional technology competencies.

The literature reviewed here underscores that, despite the declining number of standalone curriculum materials centers (CMCs) and the increasing trend toward integration into main library collections, CMCs continue to serve essential functions in academic libraries. Research on information literacy instruction, technology integration, and CMC services consistently highlights adaptability and collaboration as critical factors for success (Donaldson et al., 2022; Farthing & Gregor, 2012; Kohrman, 2015; Yoder & Scott, 2012). Successful CMCs have demonstrated resilience by evolving alongside changing educational landscapes while fostering strong collaborative partnerships. The literature emphasizes that CMC librarians who remain flexible in their approaches, actively collaborate with education faculty, engage with students, and build connections with the broader educational community are best positioned to support teacher education programs effectively (Donaldson et al., 2022; Kohrman, 2015). However, ongoing challenges such as budget constraints, space limitations, and staffing shortages continue to impact CMC operations. As our research explores, adaptability and collaboration remain central to CMCs' continued relevance and effectiveness. Our study expands on these discussions by investigating how CMCs navigate institutional shifts, implement innovative partnerships, and sustain their role within evolving teacher education programs.

Methods

This study employed an exploratory survey methodology to investigate trends related to curriculum materials centers (CMCs) and collections within academic libraries across the United States. The study adopted conceptual definitions from the 8th edition of the *Directory of Curriculum Materials Centers and Collections* (8th ed.) (Kogut et al., 2023, pp.2-5). In this context, curriculum materials collections refer to resources that support the teaching and research needs of teacher education programs in higher education institutions, regardless of their physical location. Curriculum materials centers, in contrast, are defined as specialized collections housed in designated physical spaces that serve the academic programs of preservice teachers within colleges and universities.

Although the overall survey sample was modest, we deliberately maintained a distinction between Curriculum Materials Center (CMC) librarians and education liaison librarians due to the differing nature of their responsibilities. According to the *ACRL Guidelines for Curriculum Materials Centers* (Association of College and Research Libraries [ACRL], 2017), CMC librarians manage physical centers that support teacher education through hands-on instructional collections, pedagogical lab spaces, and training on P–12 technologies. In contrast, education liaison librarians typically support teacher education programs through subject expertise, course-integrated instruction, and collection consultation, often without managing a dedicated CMC space (ACRL Education and Behavioral Sciences Section [EBSS], n.d.). In recognition of these distinct roles, the study differentiates between CMC and liaison librarians where possible. However, in analyses where subgroup sizes were too small to support reliable interpretation or where duties overlapped, responses from both groups were combined. This approach enhances clarity while maintaining analytic caution and avoiding overgeneralization from limited data.

Additionally, when discussing participants' experience levels, the study focused specifically on experience in managing CMCs and collections rather than overall

experience as an academic librarian. Institutional size categories follow the *Carnegie Basic Classification* definitions: small (< 5,000 students), mid-size (5,000–9,999), large (10,000–19,999), and very large (20,000+ students) (Carnegie Classification of Institutions of Higher Education, 2021).

The study utilized non-probability purposive sampling to recruit participants, an accepted approach in exploratory research (Powell & Connaway, p.83-119, 2004). This method allows researchers to intentionally select participants with unique experiences, rather than relying on random selection. A list of potential participants was compiled from the Directory of Curriculum Materials Centers and Collections (8th ed.) (Kogut et al., 2023), to identify potential respondents. Further verification was conducted through institutional websites to ensure participants had direct oversight of CMCs or collections. Canadian institutions included in the directory were excluded from the study. Following Institutional Review Board (IRB) approval, survey invitations were distributed via email in the Spring of 2024 to a total of 104 verified contacts, ensuring that only one representative per institution received a survey invitation email. No personal information or institutional identifiers were collected to maintain participant privacy, and participation incentives were not provided. The survey remained open for 4 weeks, with two follow-up reminder emails sent to encourage responses.

The survey instrument (see Appendix) comprised 26 primary questions, which expanded to 52 questions using skip logic to customize the response path based on participants' previous answers, reducing unnecessary questions and minimizing respondent fatigue. The questionnaire included a combination of closed-ended, open-ended, and Likert scale questions, covering demographics, information literacy instruction, faculty collaboration, collection development, technology integration, and emerging challenges for CMCs and collections. Respondents could skip any question or exit the survey at any time. Some questions allowed multiple responses, so response totals sometimes exceed the number of participants. By the end of the data collection period, 43 survey responses were received. After excluding incomplete submissions, 40 fully completed surveys were analyzed, resulting in a final response rate of 40%. Data was examined using descriptive and inferential statistical methods as well as inductive content analysis. Inferential statistical analysis included crosstabulations, chi-square tests, and correlation analyses (Pearson and Spearman) to identify potential relationships between variables. Percentages presented in the findings reflect the number of respondents per specific question, rounded to the nearest whole number. As an exploratory study using purposive sampling, findings are not generalizable to all academic libraries but offer insight into trends and practices within a subset of institutions.

Analysis and Discussion

Demographics

To gain a foundational understanding of the current landscape of curriculum materials centers and collections librarianship, this section begins with an analysis of demographic data and an exploration of respondents' roles, experience levels, and academic backgrounds. The survey revealed that most respondents (75%, n=30) identified as education liaison librarians who manage curriculum materials collections in addition to their broader responsibilities. In contrast, 25% (n=10) identified as dedicated

CMC librarians working within specialized CMC spaces. Although this subdivision of the survey population results in small sample sizes, we retained this distinction due to meaningful differences in responsibilities, physical location, and approaches to faculty collaboration. Survey data indicate that CMC-related responsibilities are frequently embedded within broader librarian roles rather than structured as standalone duties. However, given the small sample sizes, these findings should be interpreted as exploratory.

Survey responses indicated that most CMCs and collections (70%, n=28) were housed within the main library, which suggests that a centralized model may enhance integration with other library services. The remainder were in education-specific spaces, such as schools of education (18%, n=7) and dedicated education libraries (13%, n=5).

The survey revealed that 83% (n=33) of all respondents had additional duties beyond CMC/collection management, while only 18% (n=7) reported devoting 100% of their time to CMCs. Among those with additional responsibilities, nearly half reported spending less than 25% of their time on CMC-related tasks (see Figure 1).

Figure 1. *Time Spent on CMC/Collection Responsibilities for those with Additional Duties (n=33)*

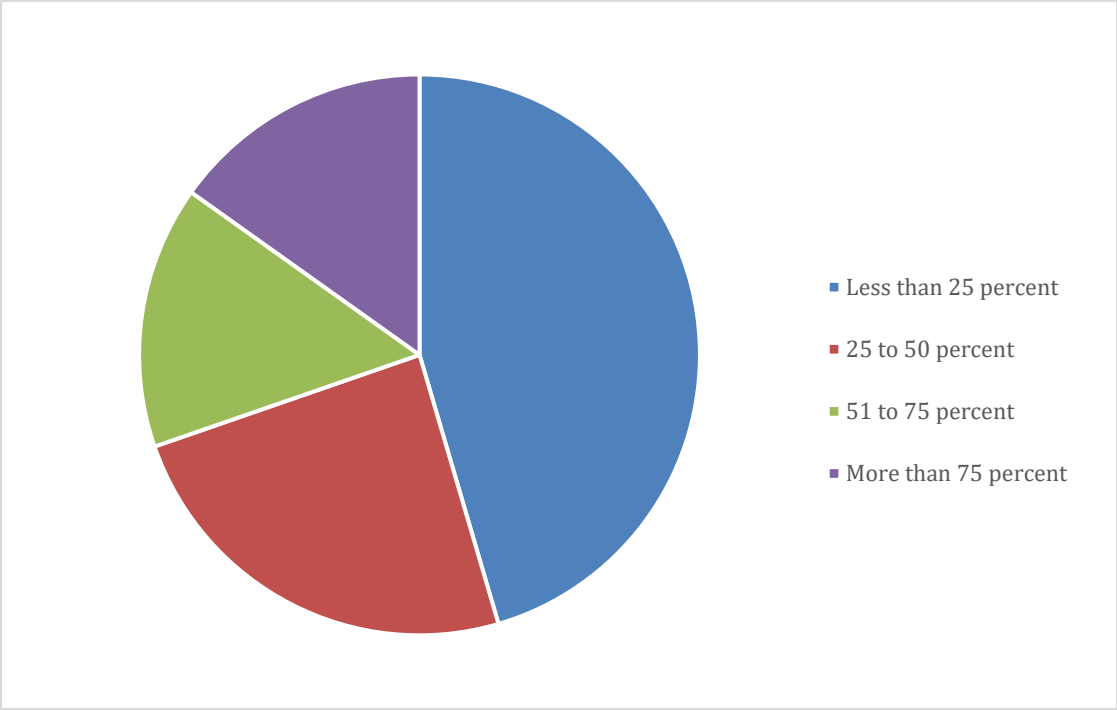

Figure 1: This figure illustrates how much time respondents spend on CMC or curriculum materials collection responsibilities, particularly when these are treated as add-on duties.

This suggests that management of curriculum materials centers and collections may function as a secondary role for many librarians. This pattern is consistent with broader findings by Donaldson et al. (2022), who reported that 88% of education librarians were overextended due to increased responsibilities resulting from reduced staffing. While their study was not limited to curriculum materials centers and collections, the parallels in workload distribution are noteworthy. These workload constraints may limit librarians'

ability to maintain consistent programming or establish sustained faculty partnerships, particularly when curriculum materials center or collection responsibilities are treated as a secondary responsibility.

Data on the educational backgrounds of CMC and education liaison librarians provide insight into their qualifications and interdisciplinary expertise. A strong academic alignment with CMC and collection-related responsibilities is evident, with 28 of 40 (70%) reporting at least one (undergraduate or graduate) degree in education and an additional 2 respondents (7%) indicating completion of an alternative certification or credential program in the field. Because the degree question allowed multiple selections, these totals reflect types of education-related preparation rather than mutually exclusive highest-degree categories.

Participants also reported a broad range of experience working with Curriculum Materials Centers or curriculum collections. Among CMC librarians (n = 10), experience levels included 1–3 years (n=2, 20%), 4–6 years (n=3, 30%), 7–9 years (n=1,10%), and more than 10 years (n=4, 40%). Among education liaison librarians responsible for curriculum collections (n = 30), experience ranged from less than one year (n=2, 7%), 1–3 years (n=4, 13%), 4–6 years (n=5,1%), 7–9 years (n=4, 13%), to more than 10 years (n=15, 50%). A Pearson correlation analysis revealed no statistically significant relationship between holding a degree in education and the length of time managing curriculum materials collections, $r(28) = -.21$, $p = .27$, suggesting that while an education background may enhance subject familiarity, it does not appear to be associated with tenure in these roles.

Survey respondents represented institutions of varying sizes. Very small institutions enrolling under 1,000 students were minimally represented (n = 2), while the remaining respondents were affiliated with institutions enrolling 1,000–4,999 students (n = 9), 5,000–9,999 students (n = 12), and 10,000–19,000 students (n = 7). The sample also included respondents from very large institutions enrolling 20,000 and above (n = 10). These distributions indicate that the survey captured perspectives from a range of institutional contexts, with somewhat greater representation from mid-sized (5,000–9,999) and very large (20,000 and above) institutions.

When cross-tabulating respondents' years of experience with institutional size, no clear or consistent patterns emerged. For example, among respondents from institutions enrolling 1,000–4,999 students, both CMC librarians and education liaison librarians were distributed across multiple experience ranges, including substantial numbers with more than 10 years of experience. Similar variation appeared in other institutional-size categories. These mixed distributions indicate that experience levels are not strongly associated with institutional enrollment size in this dataset. Unlike Kohrman (2015), who reported that smaller institutions often faced staffing constraints that limited specialization and continuity in CMC roles, the present dataset does not show a clear association between smaller institution size and lower experience levels.

Survey responses also indicated substantial variation in how institutions staff their curriculum materials centers and collections. Note that not all respondents answered every staffing question. Professional librarian staffing (n = 38) was relatively consistent, with most institutions reporting one professional librarian assigned to CMC or curriculum collection responsibilities (n = 33; 87%), a small number reporting two or more (n = 3; 8%), and very few reporting none (n = 2; 5%). Paraprofessional staffing (n = 35) was

more limited: over one-third of institutions reported no paraprofessional support (n = 13; 37%), approximately half reported one paraprofessional (n = 18; 51%), and only a few reported two or more (n = 4; 11%). Student worker staffing (n = 39) showed the greatest variability, ranging from no student workers (n = 9; 23%), to one (n = 8; 21%), two (n = 7; 18%), three (n = 3; 8%), four (n = 2; 5%), or five or more (n = 10; 26%). Taken together, these results suggest general patterns in staffing.

All surveyed institutions (n = 40) reported serving undergraduate students (100%), with the majority (93%, n = 37) also supporting master's students. Fewer institutions reported supporting doctoral students (35%, n = 14) or certificate programs (23%, n = 9). Five respondents (13%) noted serving additional user groups, in the "other" category, including local K–12 teachers, university-affiliated preschools, and alumni. These data reflect the primary service orientation of CMCs and curriculum collections toward teacher preparation and graduate-level education.

Information Literacy

Recognizing the essential role information literacy plays in fostering student success, our survey explored the instructional methods used by CMC and education librarians, focusing on the frequency, format, and content of information literacy sessions offered to education students. Survey responses indicated a strong emphasis on information literacy instruction, with 90% (*n* = 36) of CMC and education liaison librarians providing this service. However, due to the small sample size, results should be interpreted as exploratory rather than generalizable. Variations in instructional frequency and format were reported depending on the academic level and type of literacy skills being taught. Most respondents reported offering orientation sessions and assignment-focused instruction either "frequently" or "always." See Figure 2.

Figure 2. *Frequency of orientation and assignment-focused information literacy sessions provided by CMC and education liaison librarians*

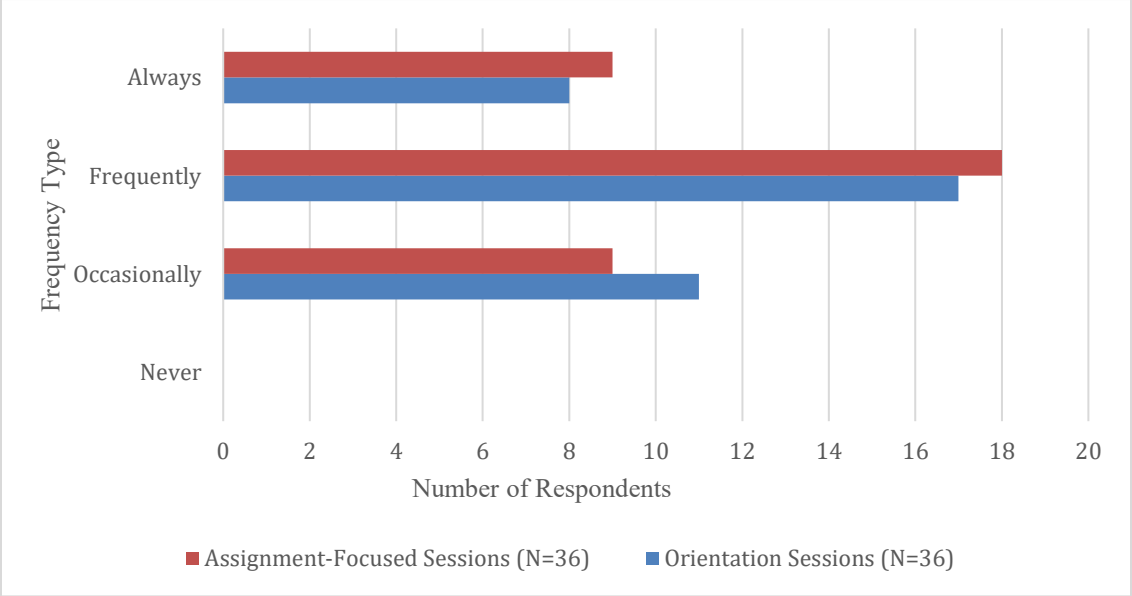

Figure 2: Response options included "Never," "Occasionally," "Frequently," and "Always"; "Never" received no responses.

Instruction sessions focused on subject-specific databases were reported at slightly higher frequencies, with 57% (n = 20) of respondents providing these sessions "frequently" and 20% (n = 7) selecting "always." Survey responses indicated that assignment-focused, orientation, and database instruction were most frequently aligned with undergraduate and master's-level support. Specifically, 95% (n = 38) of respondents reported offering instruction for undergraduate students, and 93% (n = 37) for master's students. In contrast, only 30% (n = 12) of institutions reported offering such sessions for doctoral students, 28% (n = 11) for educator certificate programs, and 18% (n = 7) for other audiences, including alumni and community educators. These findings suggest that instructional services tend to be concentrated at the undergraduate and master's levels, with comparatively less emphasis on advanced or alternative user groups. Given the small subgroup sizes, these trends should be interpreted as exploratory.

The survey also explored the frequency of different formats for delivering information literacy instruction (see Figure 3). In-person instruction was the dominant format, with most respondents indicating frequent use. This may reflect librarians' emphasis on direct engagement, with in-person sessions often considered more effective, or could merely reflect the overall most common format courses are provided in at most institutions. Synchronous and asynchronous formats were reported less frequently. These findings suggest that while librarians may value the flexibility of virtual formats, real-time instruction, in-person, continues to be the most common delivery method.

Figure 3. *Formats for Delivering Information Literacy Instruction among Survey Participants (N=36).*

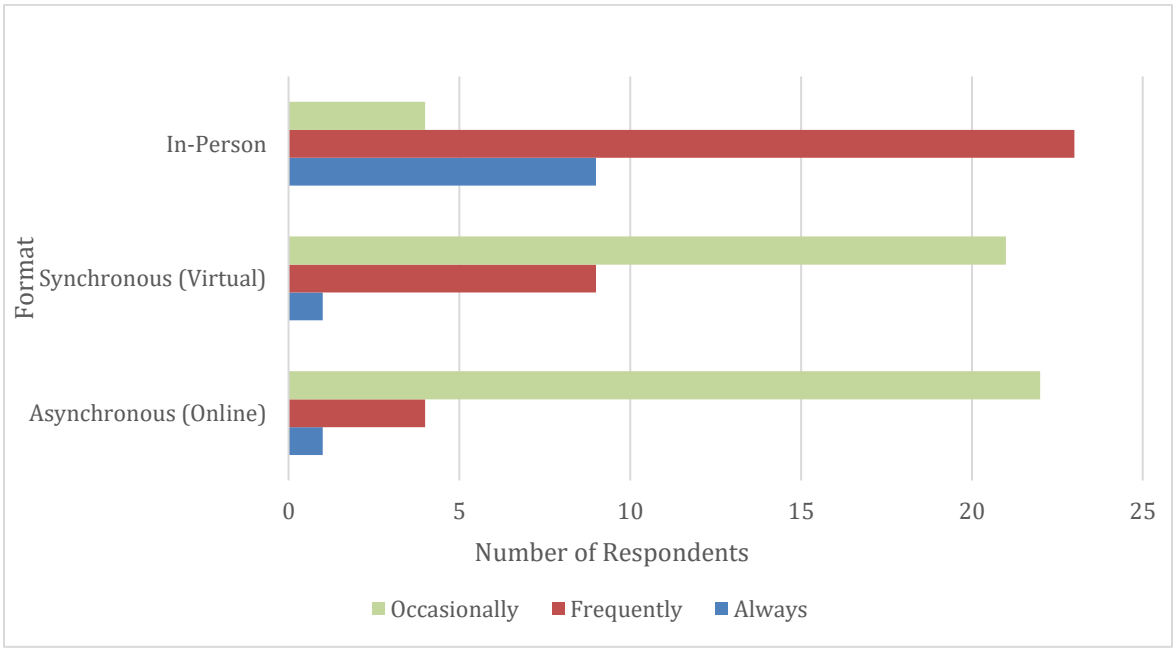

Figure 3: This figure shows the number of respondents who reported providing instruction in each format ("Occasionally", "Frequently", or "Always").

The data collected on instructional types and formats suggest meaningful patterns. The relatively high frequency of database instruction across academic levels may indicate that librarians place significant emphasis on developing students' research competencies,

particularly in graduate-level teacher education programs. While in-person instruction remains the most used format, the relatively limited adoption of synchronous and asynchronous virtual sessions may reflect institutional constraints, such as staffing, technology infrastructure, pedagogical preferences, or simply course format. Overall, the survey findings provide insight into how CMC and education liaison librarians structure information literacy instruction: through targeted sessions that focus on assignment-related support and database proficiency, most often delivered in person.

The survey also examined the extent of digital content creation for information literacy instruction (see Figure 4). Respondents commonly used LibGuides, slides, and videos, with fewer using tutorials and quizzes. A statistically significant positive relationship was identified using Spearman's rank-order correlation, $\rho(38) = .32$, $p = .046$, suggesting that respondents with longer experience supporting CMCs may be more likely to adopt digital instructional tools. Most respondents who did not create digital content cited time and skill limitations as barriers. This aligns with Donaldson et al.'s (2022) findings regarding time constraints and technical challenges faced by education librarians, suggesting persistent systemic issues across the field. The findings indicate that while digital content creation is widespread, targeted professional development could support further adoption by addressing time and skill constraints.

Figure 4. *Digital Instructional Content Created by Librarians*

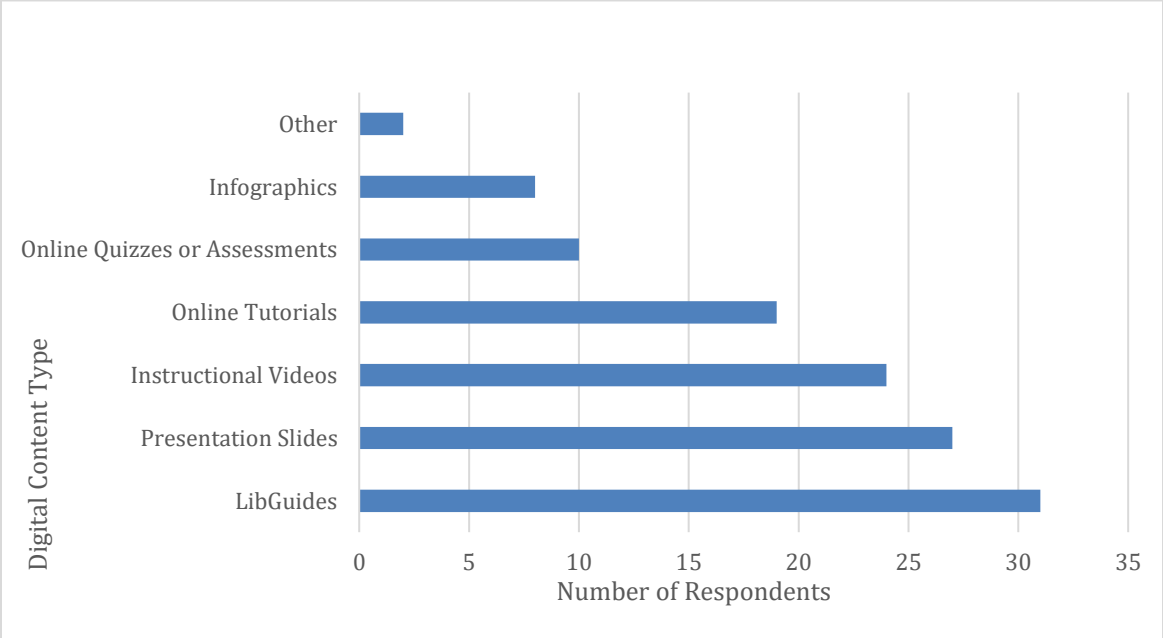

Figure 4: This figure shows the types of digital instructional content—such as LibGuides, slides, videos, tutorials, and quizzes—created by CMC and education liaison librarians to support information literacy instruction.

Technology

With technology playing an ever-growing role in shaping educational environments, assessing the technological infrastructure within CMCs is prudent. The survey asked participants about the presence of computer labs and their alignment with P–12 classroom technologies. Among the 40 respondents, only 28% (n = 11) reported

having a dedicated CMC computer lab. The majority (63%, n = 25) indicated that their CMC lacked a lab, and 10% (n = 4) reported having no dedicated CMC space at all.

Institution size appears to be associated with computer lab availability. None of the small institutions with fewer than 1,000 students had a lab, and only 1 of 9 institutions in the 1,000–4,999 enrollment range had one. By contrast, nearly half of the large institutions with 20,000+ students' enrollment (4 out of 10) reported having a lab, suggesting resource disparities based on institutional size.

Among the 11 institutions with a CMC lab, desktop computers were universally available (100%, n = 11). Widely used collaborative tools such as Google Workspace and Microsoft Teams were present in 91% (n = 10) of labs. SMART Boards were found in 45% (n = 5), while more advanced tools—Interactive Flat Panels (IFPs) and digital response systems (clickers)—were present in only one lab each.

Instructional use of these labs focused primarily on general orientation and hands-on sessions (45%, n = 5). Assignment-specific and individual instruction were each reported by 27% (n = 3). Only one respondent offered workshops on integrating SMART Boards or IFPs into curricula, highlighting an opportunity to expand instructional programming with these tools. Other commonly reported technologies included iPads (73%, n = 8) and robotic toys/kits like Dash and Dot or Kinderbot (64%, n = 7). In contrast, digital cameras were available in just 27% (n = 3) of CMC computer labs, and Chromebooks in only one. Respondents also mentioned additional tools, including augmented reality toys, digital voice recorders, projectors, mirrorless cameras, 3D scanners, calculators, noise-canceling headphones, zSpace (AR/VR platform), Novel Effect (read-aloud app), and Osmo (educational gaming system).

Among respondents without a dedicated lab (63%, n = 26), more than half (52%, n = 13) reported using multipurpose library classrooms for technology training. A smaller number relied on central library labs (24%, n = 6), while 40% (n = 10) indicated that no educational technology instruction was offered. Since respondents could select multiple applicable options, the reported percentages reflect overlapping responses rather than a cumulative total. The absence of dedicated spaces for technology instruction may contribute to lower visibility of the CMC among education faculty, which could reduce opportunities for collaborative integration of instructional tools.

To evaluate how well CMC technologies mirror those used in P–12 classrooms, participants with a dedicated lab (n = 11) were asked to assess alignment. The majority (55%, n = 6) reported that their CMC was "moderately" aligned, while 36% (n = 4) rated them as "mainly" aligned. One respondent reported no alignment, and no participants selected "completely" aligned. This limited alignment echoes Carr's (2012) concern that CMCs might struggle with uneven access to instructional technologies due to infrastructure limitations. Limited alignment may reduce opportunities for preservice teachers to engage with classroom-relevant technologies and could influence how frequently faculty incorporate library-supported tools into assignments. While our findings are exploratory, they suggest that these longstanding issues remain relevant for some institutions.

A strong, statistically significant positive correlation was identified using Pearson's correlation coefficient, $r(38) = .78$, $p = .005$, suggesting that larger institutions may be more likely to have CMCs equipped with tools comparable to those used in P–12 settings. This result complements Kohrman's (2015) observation that smaller institutions

often lack the resources to provide comprehensive technology support within CMCs. However, given the small number of respondents with dedicated labs (n = 11), this result should be interpreted with caution and considered exploratory.

A pattern also emerged when examining professional collaboration levels. Respondents with national-level collaboration were more likely to report that their CMC technology was closely aligned with P–12 classrooms. Those with only local or state-level collaboration tended to perceive a lower degree of alignment. This may reflect broader exposure to standardized technology practices among nationally engaged professionals.

While this portion of the analysis reflects a small subgroup of institutions (n = 11 with labs), the findings offer exploratory insight into technology availability and instructional use. Results suggest an uneven distribution of advanced tools and opportunities for stronger integration of technologies like SMART Boards and IFPs into teaching practices.

Collaborations

The next part of our survey examined the depth and variety of partnerships that CMC and education liaison librarians cultivate with education departments to support their academic and instructional goals (see Table 1). Most respondents reported engaging with education departments through faculty advisement, meeting attendance, and the distribution of promotional materials. Fewer respondents hosted orientations or reported having education faculty serve on CMC advisory boards. Additional outreach efforts noted under "Other" included creating virtual bulletin boards, contributing to education department newsletters, and embedding librarians within education courses.

Table 1. *Collaborative Activities with the School of Education on a Departmental Level*

Activity	Number of Respondents
Education faculty member provides advice to the librarian	27
Librarian attends education faculty meetings	22
CMC promotional materials are regularly emailed to Education faculty and administrators	22
Librarian engages with students and faculty on professional social media platforms	13
A link to the CMC website is included on the School of Education website	10
Other	10
Librarian hosts an open house and/or orientation for Education faculty and administration	9
Education faculty members serve on a CMC advisory board	5
None	3

We also examined collaboration at the individual faculty level, where instruction sessions, collection development, and syllabus sharing were the most commonly reported forms of collaboration (see Table 2). Less frequent responses—such as grant writing and co-authoring publications—may highlight areas for future growth. Several respondents

also described creative partnerships under "Other," including co-teaching and author event planning.

Table 2. *Collaborative Activities with Individual Faculty Members*

Activity	Number of Respondents
Bibliographic instruction sessions	31
Collaborative collection development projects	25
Syllabus sharing	17
Collaborative research projects	13
Conference presentations	13
Site visits to P-12 schools and libraries	9
Co-authoring publications	6
Grant writing	4
None	4
Other	3

Student engagement with CMC collections and services was more limited (see Table 3). While some respondents indicated that education students participate in evaluating resources or are notified of new acquisitions, nearly half (n = 18) reported no student involvement. Under "Other," respondents described more informal participation, such as student contributions to course-related displays or one-on-one reference consultations.

Table 3. *Collaborative activities with education students*

Activity	Number of Respondents
None	18
Education students evaluate CMC/Collection resources	12
Education students get notified of new acquisitions	11
Other	4
Education students are introduced to local teachers	3
Education students initiate workshops and/or training sessions	3

Finally, we asked respondents about external partnerships with education professionals outside their institutions (see Table 4). Collaborations were most commonly reported with CMC or education librarians at the state and national levels. Partnerships with P–12 librarians/media specialists were more frequent at the local level, though less common overall. Fourteen respondents reported having no external collaborations, highlighting opportunities for expanding outreach networks.

Table 4. *External collaborative activities with various groups*

Activity	Number of Respondents
P-12 librarians/media specialists on local/regional level	18
CMC or education librarians on national level	17
CMC or education librarians on state level	17
None	14
CMC or education librarians on local/regional level	13
P-12 librarians/media specialists on state level	12
P-12 librarians/media specialists on national level	3
Other	1

The survey responses also provide insight into how CMC and education liaison librarians perceive their partnership status with education faculty, identifying strengths and areas for growth. Respondents' perceptions of their partnership with School of Education faculty were generally positive. Forty percent (n = 17) of respondents agreed, when asked if faculty consider them equal partners in the instructional process, while 13% (n = 5) strongly agreed. However, 20% (n = 8) disagreed, and 5% (n = 1) strongly disagreed, suggesting that challenges to full partnership recognition may persist. Additionally, 23% (n = 9) answered no opinion**.** Overall, the responses point to differing institutional expectations for librarian–faculty collaboration. These findings suggest that while strong collaborative relationships are present, there is still room for improvement in ensuring that CMC and education liaison librarians are recognized as essential partners in the educational process, rather than as supplementary support.

Respondents who spent less than 25% of their time supporting curriculum materials collections were primarily neutral or disagreed when asked if faculty consider them equal partners in the instructional process. Conversely, respondents who strongly agreed with the statement tended to spend more time (51% or more) working with curriculum materials. These nuanced findings point to the complexity of faculty–librarian relationships and echo Yoder and Scott's (2012) argument that librarians must actively demonstrate their value beyond traditional resource provision to strengthen institutional relevance.

A moderate, statistically significant positive correlation (Pearson's correlation coefficient, $r(38) = .45$, $p = .004$), indicated that respondents who felt regarded as equal partners by faculty were also more likely to report that faculty require the inclusion of curriculum materials in student assignments. This suggests that when faculty view librarians as equal partners, they may be more inclined to incorporate curriculum materials into coursework. It may also reflect the perception that well-developed and relevant CMC collections contribute to stronger faculty-librarian collaboration. These findings align with Donaldson et al.'s (2022) broader observation that faculty–librarian partnerships are both essential and complex. While our data are specific to curriculum materials centers, the results suggest that such collections may provide librarians with distinct opportunities to demonstrate value and strengthen collaborative relationships with faculty.

The data presented in Tables 1 through 4 reflect a complex landscape of collaboration among CMC and education liaison librarians, faculty, students, and external

partners. While many respondents reported participating in instructional collaboration with education faculty, only a portion thought faculty considered them equal partners in the instructional process. This gap reflects differences in how respondents perceive faculty recognition of their role in the instructional process. These dynamics echo Donaldson et al.'s (2022) findings, which indicate that even when librarians are engaged in instruction, they often face challenges in securing full partnership recognition.

Student involvement was also limited across the sample. While some respondents described innovative uses of displays or individual consultations, structured, project-based student engagement was infrequently reported. This differs from case studies such as Ayton and Capraro (2021), and Correll and Bornstein (2018), which both illustrated the potential for transformative partnerships when students were given active roles in shaping CMC programming. Although case studies reflect unique institutional contexts, their success raises important questions about how CMCs might cultivate more meaningful, student-centered collaborations.

External professional partnerships were strongest among peers at the state and national levels but less common with local P–12 librarians or community educators. As Walker (2012) argued, robust stakeholder collaboration is essential for curriculum materials centers to remain integrated within the broader educational landscape. However, our findings suggest that CMC engagement with external partners may be limited in some institutions, whether due to time constraints, staffing limitations, or a lack of established outreach infrastructure.

Taken together, these findings indicate an opportunity for deeper multi-stakeholder engagement—across faculty, students, and external education professionals. While the study's small sample requires cautious interpretation, the patterns observed here underscore both the potential benefits of intentional collaboration and the structural challenges that may inhibit it. Future research could explore what institutional conditions foster collaborative practice, and how CMC librarians might strategically advocate for more integrated roles in teacher preparation.

The data indicate that survey participants actively collaborate with faculty, students, and external educational partners; however, the level and nature of these collaborations appear to vary. Strong internal relationships exist, particularly in instructional support, but external partnerships remain less developed, especially at the national level. Additionally, while there is evidence of positive relationships with education faculty, the variability in perceptions of partnership suggests a continued need for librarians to advocate for their role as equal contributors to their institutions' instructional and research missions.

To foster stronger collaborations, librarians could consider expanding outreach efforts, exploring joint grant opportunities, and enhancing student-led initiatives. Developing structured programs to increase national-level collaborations may also enhance resource sharing and best practice exchanges, ultimately strengthening the CMC community. Given that nearly half of respondents reported spending less than a quarter of their time on CMC or education collections responsibilities, collaboration efforts may be most feasible when approached incrementally. Smaller-scale actions—such as sharing resources, joining existing initiatives, or contributing to selective projects—may align better with current workloads, while more extensive collaborations may be possible only in institutions with greater dedicated time or support.

Conclusion

Our research highlights several key findings about the current state of CMCs and collections, particularly in the areas of information literacy, technology integration, and collaboration. The study underscores the integral role of information literacy, with an overwhelming majority of respondents confirming that they provide instruction to education students. While most engagement is with undergraduates, services for master's, doctoral, and certificate students appear less consistent. This suggests an opportunity for librarians to expand their instructional reach and support a broader range of learners. Additionally, the data indicate that librarians at larger institutions are more likely to report that they frequently offer targeted instruction sessions, such as subject-specific database instruction, than those at smaller institutions. Expanding synchronous and asynchronous instructional formats could help address this disparity by offering smaller institutions more flexible options for delivering instruction.

Most survey respondents do not have a dedicated CMC computer lab with access to educational technology such as SMART Boards and Interactive Flat Panels (IFPs) and instead rely on other library spaces to provide access to technology for future teachers. There remains a gap between the technology available in CMCs and the tools commonly used in contemporary P–12 classrooms. Notably, no respondents rated their technology as fully aligned with P–12 environments, indicating room for improvement in preservice teachers' exposure to relevant tools. Future initiatives could focus on expanding training and workshops that bridge this gap, ensuring that CMCs better support educational communities through hands-on experience with up-to-date technologies.

Collaboration at the individual level between librarians and education faculty emerged as a vital component in integrating library resources into teacher preparation. Bibliographic instruction, syllabus sharing, and collaborative research projects were commonly reported. Less frequent activities—such as grant writing and site visits to P–12 schools—represent areas of potential growth that could strengthen the CMC's role in connecting academic and practical applications. The study also identified a statistically significant positive correlation between respondents who felt regarded as equal partners by faculty and those who reported that faculty require students to use curriculum materials. This suggests that stronger librarian–faculty partnerships may be associated with to more consistent integration of CMC resources into coursework.

While many respondents perceive positive working relationships with education faculty, barriers to full recognition as equal collaborators remain. Although no statistically significant relationships were found between time spent on CMC work or teaching information literacy and perceived partnership status, the correlation between perceived equality and integration of CMC collections into faculty assignments may suggest that that strengthening the visibility and instructional relevance of CMC collections could support deeper collaboration.

This study has several limitations. The use of non-probability purposive sampling and the reliance on contact information from the 8th edition of the *Directory of Curriculum Materials Centers and Collections* (Kogut et al., 2023) may limit the generalizability of the findings. Additionally, while appropriate for exploratory research, the modest response rate limits broader statistical conclusions. The study also relies on self-reported data, which may reflect perception more than practice.

Given the exploratory nature of this study, future research could benefit from a broader, longitudinal approach to examine how CMC services evolve over time, particularly in response to technological change. A more focused analysis of instructional strategies and technology use could help identify best practices to guide other institutions. Further study of faculty–librarian collaboration, especially at regional and national levels, may offer insight into effective models for integrating CMC resources more deeply into teacher education programs.

In conclusion, this study reinforces the essential role of curriculum materials centers and collections in supporting education through access to teaching resources, the promotion of information literacy, and active collaboration. However, variability in technology integration, staffing, and faculty engagement suggests opportunities for continued growth. By addressing these gaps and expanding strategic partnerships, CMCs can continue to adapt and thrive in an evolving educational landscape—ensuring their relevance and impact in preparing future educators.

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Appendix

SURVEY INSTRUMENT
NAVIGATING THE FUTURE: A SURVEY OF CURRICULUM MATERIALS CENTERS AND COLLECTIONS IN THE POST-PANDEMIC ERA

1. **How would you characterize your current role within your institution**? *(select one)*

a. Curriculum Materials Center (CMC) librarian working in dedicated CMC space *(if selected, go to question 1.1)*

b. Librarian (subject specialist and/or education liaison) whose job responsibilities include maintaining a Curriculum Materials Collection and providing support to education students *(if selected, go to question 1.2)*

1.1. How long have you worked as a Curriculum Materials Center (CMC) librarian? *(select one)*

a. Under 1 year
b. 1-3 years
c. 4-6 years
d. 7-9 years
e. More than 10 years

1.2. How long have you been responsible for the Curriculum Materials Collection in your library? *(select one)*

a. Under 1 year
b. 1-3 years
c. 4-6 years
d. 7-9 years
e. More than 10 years

2. **How much of your time is dedicated to supporting the Curriculum Materials Center/Collection?** *(select one)*

a. Managing the Curriculum Materials Center (physical location of the Curriculum Materials Collection) is my sole responsibility

b. Managing the Curriculum Materials Collection (variety of materials to assist teacher education students that are not collocated in the same physical space) is my sole responsibility

c. I have additional responsibilities across various library departments or services *(if selected, go to question 2.1.)*

2.1. What portion of your time do you estimate is devoted to working at the Curriculum Materials Center or with the Curriculum Materials Collection? *(select one)*

a. Less than 25 percent
b. 25 to 50 percent
c. 51 to 75 percent
d. More than 75 percent
e. Not sure
f. Unable to estimate

3. **Do you have a degree in education?**
   a. Yes *(if selected, go to question 3.1)*
   b. No *(if selected, go to question 3.2)*
      3.1. What is your educational degree? (*select all that apply)*
         a. Undergraduate degree in Education
         b. Graduate degree in Education
         c. Alternative certification or credential program in Education
      3.2. If you do not have a degree in education, what other field(s) do you have a degree in? *(select all that apply)*
         a. Bachelor's degree in a related field (e, g., psychology, sociology)
         b. Master's degree in a related field
         c. Doctoral degree in a related field (library science, educational psychology, curriculum and instruction)
         d. Other, please specify

4. **What is the approximate number of students currently enrolled at your institution?** *(select one)*
   a. Under 1,000
   b. 1,000 – 4,999
   c. 5,000 – 9,999
   d. 10,000 – 19,000
   e. 20,000 and above
   f. Not sure

5. **Please select the location of your CMC/Collection from the following options:** *(select one)*
   a. within main library
   b. within school of education building
   c. within education library
   d. other (please specify)

6. **What is the current staffing structure supporting your CMC/Collection?** *(select one for each category)*
   a. Professional Librarian 0 1 2 3 4 5+
   b. Para-professional Staff 0 1 2 3 4 5+
   c. Student workers 0 1 2 3 4 5+

7. **Please select the category of education constituents for whom you provide services:***(select all that apply)*
   a. Undergraduate students
   b. Master's students
   c. Doctoral students
   d. Educator certificate candidates
   e. Other (please specify)

8. **Do you teach information literacy to education students?**
   a. Yes (*if selected go to question 9*)
   b. No (*if selected go to question 30*)

9. **How frequently do you provide the following types of instruction when teaching information literacy to education students?**
   a. An orientation session focused on print and electronic resources
   b. A session focused on a specific class assignment
   c. A session focused on using subject-specific databases
   d. Do not provide information literacy instruction *(if selected, go to question 12)*
   Please select one of the following options for each type of instruction:
   Never – Occasionally – Frequently – Always

10. **How frequently do you provide instruction in each of the following formats when teaching information literacy to education students?**
    a. In person
    b. Virtually (synchronous)
    c. Online models (asynchronous)
    d. Other (please specify)
    Please select one of the following options for each type of instruction
    Never – Occasionally – Frequently – Always

11. **Do you create digital content to assist you in information literacy instruction sessions?**
    a. Yes *(if selected, go to question 11.1)*
    b. No (*if selected, go to question 11.2)*

    11.1. What type of digital content do you create for information literacy instruction sessions? *(select all that apply)*
    a. LibGuides
    b. Online tutorial
    c. Infographics
    d. Instructional videos
    e. Presentation slides
    f. Online quizzes or assessments
    g. Other (please specify)

    11.2. What are the main reasons you do not create digital content for information literacy sessions? *(select all that apply):*
    a. Lack of technical skills or expertise
    b. Insufficient time
    c. Preference for traditional instruction methods
    d. Concerns about copyright or licensing issues
    e. Other (please specify)

12. How frequently do information literacy sessions engage students from the categories listed below:

a. Undergraduate students
b. Master's students
c. Doctoral students
d. Certificate applicants

Please select one of the following options for each type of student
Never – Occasionally – Frequently – Always

13. Do you have a computer lab at your Curriculum Materials Center?

a. Yes *(if selected, go to question 13.1)*
b. No (*if selected, go to question 13.5)*
c. My library doesn't have a dedicated CMC space (*if selected, go to question 13.5).*

13.1. Is your lab equipped with the following hardware and/or software? *(select all that apply):*

a. Interactive Flat Panel (IFP)
b. SMARTboard
c. Desktop computers
d. Digital collaborative tools (e.g., Google Workspace, Microsoft Teams)
e. Digital response system (e.g., clickers, polling software)
f. Other (please specify)

13.2. What types of instruction do you provide students with on the educational use of Interactive Flat panels (IFP) and/or SMARTboard? *(select all that apply):*

a. General orientation and hands-on instruction session
b. Hands-on instruction focused on a specific class assignment
c. Workshop on SMARTboard/IFP basics and its integration into the PK-12 curriculum
d. Individual instruction on SMARTboard/IFP use
e. CMC doesn't have SMARTboard/IFP

13.3. What other technology does your Curriculum Materials Center have? (*select all that apply):*

a. iPads
b. Chromebooks
c. Digital cameras
d. Robotic toys and kits (e.g., Kinderbot, Dash & Dot)
f. Other (please specify)

13.4. In your opinion, to what extent does the educational technology used in your Curriculum Materials Center mirror the technology used in today's PK-12 classrooms*?* *(select one)*

a. Not at all aligned
b. Moderately aligned
c. Mostly aligned
d. Completely aligned

13.5. What space at your library is used when providing students with educational technology-related instruction? (*select all that apply):*

a. Library computer/technology lab
b. IT lab
c. Classroom spaces within the library
d. Dedicated technology training rooms
e. No instruction on the use of educational technology provided

14. What forms of outreach to the School of Education are taking place within your institution? (*select all that apply):*

a. Librarian attends education faculty meetings
b. Education faculty member serves on the CMC advisory board
c. Education faculty member provides advice to the CMC/Collection librarian
d. CMC/Collection promotional materials are regularly emailed to education faculty and administration
e. CMC/Collection librarian hosts open house and/or orientation for education faculty and administration
f. A link to the CMC/Collection website is included on the School of Education website
g. CMC/ Collection librarian engages with students and faculty on professional social media platforms
h. Other (please specify)
i. None

15. What forms of collaboration between CMC/Collection librarians and individual members of the education faculty are taking place at your institution? *(select all that apply)*

a. Collaborative research projects
b. Co-authoring publications
c. Conference presentations
d. Grant writing
e. Site visits to PK-12 schools and libraries
f. Syllabus sharing
g. Bibliographic instruction sessions
h. Collaborative collection development projects
i. Other (please specify)
j. None

16. **What forms of collaboration between CMC/Collection librarian(s) and education students are taking place at your institution? (***select all that apply)*
    a. Education students evaluate CMC/Collection resources
    b. Education students get notified on new acquisitions
    c. Education students are represented on CMC advisory committee
    d. Education students are introduced to local schoolteachers
    e. Education students initiate workshops and/or training sessions
    f. Other (please specify)
    g. None

17. **Off-campus, who else have you formed professional collaborations with?** (*select all that apply)*
    a. CMC or education librarians on local/regional level
    b. CMC or education librarians on state level
    c. CMC or education librarians on national level
    d. PK-12 librarians/media specialists on local /regional level
    e. PK-12 librarians/media specialists on state level
    f. PK-12 librarians/media specialists on national level
    g. Other, please specify
    h. None

18. **How strongly do you agree or disagree with the following statement: 'The faculty of School of Education at my institution sees me as an equal partner in the instruction process".**
    Please select one of the following options: Strongly Disagree, Disagree, No Opinion, Agree, Strongly Agree

19. **Does your library participate in cooperative collection development in the area of curriculum materials? Cooperative collection development is also known as building and maintaining a shared collection with other libraries.**
    a. Yes (*if selected, go to question 19.1*)
    b. No, but interested in participating
    c. No, not interested
        19.1. What types of materials are included in your shared collection? (*select all that apply)*
            a. K-12 textbooks
            b. Children's/Young Adult literature
            c. Professional literature collection
            d. Kits, games, manipulatives
            e. Other (Please specify)
        19.2. Does the library you cooperate with belong to the same university system?
            a. Yes
            b. No

20. How do you perceive the balance between electronic and hard copy textbook acquisitions in Curriculum Material Centers and/or Curriculum Materials Collections in general? Please indicate your level of agreement with the following statements:

a. CMC/Collections should prioritize acquiring hard copy textbooks due to their tangible benefits, such as ease of access and classroom use
b. Electronic textbooks offer distinct advantages, such as accessibility and integration into digital learning platforms, making them essential for CMC/Collections
c. The disadvantages of hard copy textbooks, such as budget constrains and storage issues, should prompt CMC/Collections to prioritize digital acquisitions
d. Despite the advantages of digital textbooks, concerns about technological dependence and screen time necessitate a continued focus on acquiring hard copy textbooks
e. A balanced approach that considers the strengths and weaknesses of both electronic and hard copy textbook formats is essential for effective CMC/Collection acquisitions.

Please rate your agreement with each statement on a scale Strongly disagree – disagree – neutral – agree – strongly agree)

21. In your role as CMC/Collection librarian, are you currently using Open Educational Resources (OER)?

a. Yes *(if selected, go to question 21.1)*
b. No (if selected, go to question *21.3*)

21.1. What types of OER do you typically use at CMC? (*Select all that apply)***:**

a. Textbooks
b. Lecture notes
c. Videos
d. Interactive stimulations
e. Quizzes/assessments
f. Other (Please specify)

21.2. What factors influence your decision to use OED at the CMC? (*select all that apply)*

a. Cost-effectiveness
b. Alignment with curriculum standards
c. availability of relevant materials
d. Quality content
e. Recommendations from colleagues or instructors
f. Other (Please specify)

21.3. What are the primary reasons for not using OER in your role as CMC/Collection librarian? *(select all that apply)*

a. Lack of awareness about available OER
b. Perceived quality concerns with OER materials
c. Concerns about copyright or licensing issues related to OER
d. Limited time or resources to explore and implement OER
e. Other (please specify)

22. In your opinion, how likely is it that the education faculty at your institution require the inclusion of materials from the CMC/Collection in student assignments? Please select the options that best reflect your opinion on the likelihood, and feel free to provide any additional comments or explanations in the space provided below.
Please select one of the following options: Very likely – Likely -Neutral – Unlikely – Very Unlikely

23. Please rate the frequency with which you have encountered the following challenges in your role as a CMC/Collection librarian during last three years, using the scale provided below:
a. Lack of support from University/College administration
b. Lack of support from the School of Education faculty
c. Lack of engagement on a part of education students in fully utilizing CMC/Collection resources and services
d. Lack of time due to non-CMC/Collection responsibilities and/or assignments
Please use the following scale options for each challenge: Never – Occasionally – Often – Always

24. Looking ahead to the next five years, what areas do you anticipate posing challenges to effectively managing your CMC/Collection? *(select all that apply):*
a. Staffing
b. Budget allocation
c. Space utilization
d. Technological advancements
e. Collection development strategies
f. Opportunities for professional development
g. Other (please specify)
h. None

25. Please rate your opinion on how the following higher education trends will impact your CMC/Collection in the next five years:
a. Emerging technologies (e.g., artificial intelligence, virtual reality)
b. Digital transformation and content management
c. Changing pedagogies
d. Changing program emphasis in higher education
Please use the following scale to indicate your response for each trend: Strongly disagree - Disagree – Neutral – Agree – Strongly agree

26. Do you have any other thoughts on CMCs/Collections that you would like to share with us? (500 words max)