

Scaffolded Learning Framework for Health Sciences Librarians New to the Field

Prepared by

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Core Competency #1: Orientation and Foundations

Goal: Introduce foundational concepts, resources, and organizational culture in health sciences librarianship to new librarians.

Resources:

- **MCMLA Resource Guide:** Overview of health sciences librarianship.
- **NAHSL Apprenticeship Program:** Introduction to apprenticeship objectives.
- **NNLM:** Access to training resources and support.
- **Campus-Specific Resources:** Overview of institutional resources, culture, and key players (e.g., NLM, MLA, AAMC, CHLA/ABSC, AFMC).
- **Tiers of Resources:** Introduction to general and specialized resources, including PubMed, Embase, and resources specific to education, research, and patient care.
- **Organizational Documentation:** Organizational map, institutional committees, timeline of significant events, and workload expectations.

Activities:

1. **Workshops/Webinars:**
 - Attend introductory sessions on health sciences librarianship, library services, and professional ethics.
 - Sessions focusing on the academic mission (education, research, patient care), scholarly publishing, and grant funding.
2. **Mentorship and Peer Programs:**
 - Pair with an experienced librarian or assigned navigator to provide guidance.
 - Establish a peer feedback network to encourage distributed mentorship and shared learning.
3. **Interactive Learning:**
 - Engage with current staff through introductions and discussions about specific job roles.
 - Guided self-reflection on learned concepts and support needs at intervals (1 month, 3 months, 6 months, 1 year).
 - Update and contribute to orientation documentation for future new hires.
4. **Practical Application:**
 - Demonstrate proficiency in essential tools like PubMed and articulate their applications.
 - Identify and interact with internal and external stakeholders, understanding reporting structures and organizational culture.

What Does Success Look Like?

1. **Short-Term (First 3 Months):**
 - Participation in at least one workshop/webinar.
 - Regular meetings with a mentor or peer group.
 - Ability to:
 - Articulate 3-4 roles within health sciences librarianship.
 - Identify 5 key resources (e.g., databases like PubMed, Embase).
 - Map the library's place within the institutional org chart and name key stakeholders.
2. **Ongoing:**

- Completion of self-reflection documents, showing improvement in knowledge and skills.
 - Creation of a professional development plan with defined goals and milestones.
 - Evidence of successful engagement with library staff and stakeholders.
3. **Long-Term:**
- Comprehensive understanding of institutional culture, organizational structure, and affiliations.
 - Clear ability to communicate the role of health sciences librarianship and leverage key resources effectively.

Additional Notes:

- Incorporate feedback mechanisms to tailor onboarding to the individual's baseline knowledge.
- Utilize MLA competencies and self-evaluation tools to track milestones.
- Emphasize organizational inclusivity through shared onboarding responsibilities and communication.

Core Competencies #2: Development

Goal: Develop core competencies as outlined by the Medical Library Association (MLA) while contextualizing them to the new librarian's institution and role.

Resources:

- **MLA Competencies:** Foundational skills such as information retrieval, critical appraisal, research methods, and evidence-based practice (EBP).
(Reference: [MLA Competencies](#))
- **NNLM Resources:** Continuing education and training modules.
- **Institutional Resources:** Mission, vision, strategic plan, program timelines, academic calendar, and clinical education services.
- **Additional Professional Resources:**
 - ALA, ACRL, PLA, CARL/ABRC, and regional/state-specific resources.
 - Library schools offering certifications and courses.
 - Vendor-specific resources for tools and platforms (e.g., PubMed, EndNote, Zotero).
 - Specialized training options such as EBP workshops and Library Juice Academy.

Activities:

1. **Online Courses and Workshops:**
 - Complete introductory and advanced modules on systematic reviews, evidence-based practice, and critical appraisal.
 - Attend external workshops such as MUSC's EBP introductory program, UNC's Evidence-Based Practice for the Medical Librarian, Minnesota Institute, and We Here Community School.
2. **Practical Shadowing and Mentorship:**
 - Shadow experienced librarians to gain hands-on experience in reference services, instructional sessions, and clinical support.

- Set up mentorship opportunities for Promotion and Tenure (P&T) guidance or other professional development goals.
 - Explore opportunities for cross-institution shadowing at larger libraries if local resources are limited.
3. **Personalized Learning and Liaison Integration:**
 - Develop personalized learning plans based on the librarian's strengths, background, and institutional context.
 - Understand the liaison model and its application to specific schools or programs.
 - Engage with curriculum committees, clinical educators, and research teams to contextualize the librarian's role in education, clinical, and research missions.
 4. **Research and Clinical Context Training:**
 - Build knowledge of the research lifecycle, including IRB/REB, IACUC, and clinical trial processes.
 - Engage with stakeholders to understand the library's role in supporting the clinical mission.
 - Learn about national accrediting body competencies and how they relate to the health sciences curriculum.
 5. **Hands-On and Collaborative Learning:**
 - Interact with learners (students, faculty) to understand their needs, workflows, and potential "search hacks" that inform future teaching or consultation improvements.
 - Complete a self-reflection document at key intervals (1 month, 3 months, 6 months, 1 year) to assess learning progress and identify support needs.
 6. **Vendor and Specialized Resource Training:**
 - Familiarize with institution-specific tools and platforms, leveraging vendor training resources.
 - Compare tools like EndNote vs. Zotero to understand strengths and applications.

What Does Success Look Like?

1. **Immediate Outcomes (First 3-6 Months):**
 - Completion of at least three targeted online courses or workshops.
 - Demonstration of newly acquired skills during shadowing and practice scenarios.
 - Active engagement with colleagues within and outside the library, including attendance at relevant institutional meetings or committees.
2. **Mid-Term Outcomes (6-12 Months):**
 - Ability to articulate how MLA competencies apply to their role and institution.
 - Development of a personalized professional development plan.
 - Understanding of institutional dynamics, including reporting structures, curriculum timelines, and clinical education.
3. **Long-Term Outcomes:**
 - Integration into the health sciences librarian role with clear competence in reference services, EBP, and research lifecycle support.
 - Active participation in professional organizations and networks (e.g., NNLM, MLA caucuses, CHLA/ABSC SIGs).
 - Evidence of contribution to library services or institutional goals, such as successful collaborations with stakeholders or teaching enhancements informed by user feedback.

Core Competency #3: Specialized Skills Enhancement

Goal: Gain advanced knowledge and skills in specialized areas relevant to health sciences librarianship, with a clear understanding of what “specialized” means and how enhancement pathways align with professional growth.

Definition of Specialized Skills:

Specialized skills refer to advanced competencies in focused areas of librarianship, such as data management, consumer health, public health, information technology, evidence synthesis, or emerging technologies (e.g., artificial intelligence). These skills go beyond foundational competencies and often support specific institutional, research, or clinical missions.

Resources:

- **Specialized Training Programs:**
 - MLA specializations: research data management, consumer health, systematic reviews, and more.
 - NNLM specialized training (e.g., artificial intelligence, upcoming workshops).
 - MCMLA and NAHSL programs on advanced topics (e.g., public health, data management).
 - Becker Library systematic review course, Duke Evidence-Based Medicine (EBM), UNC EBM, and other EBM training programs.
 - Data/Library Carpentries and other bootcamps for technical skill-building.
 - Web Junction, Library Juice Academy.
- **Institutional and Community Resources:**
 - Faculty development sessions, grand rounds, department lectures, CTSA hub trainings, and local institute events.
 - Inventory of library staff expertise to identify colleagues with specialized skills.
 - Listservs and professional forums to monitor current trends and questions.
- **Conferences and Networking:**
 - Attend diverse events: APHA, RDAP, Force11, AMIA, ACTS, AEA, AAPOR, Charleston Conference, regional/local conferences.
 - Engage with library “deep dives,” case presentations, and all-staff meetings to understand internal expertise.

Activities:

1. **Project-Based Learning:**
 - Undertake a project in a specialized area, such as creating a health literacy program, developing a research data management strategy, or analyzing institutional data needs.
 - Present project outcomes to peers or stakeholders to demonstrate practical application.
2. **Contextual Learning:**
 - Audit health professional courses to understand discipline-specific competencies (e.g., Nursing 101).
 - Participate in coaching or shadowing opportunities (both internal and cross-institutional) to learn specialized roles.

- Conduct deep reviews of collections to identify resources for specialized settings or audiences.
- 3. **Networking and Collaboration:**
 - Attend and actively participate in conferences, department lectures, and community events.
 - Connect with at least five professionals at an event, following up to build relationships and expand learning opportunities.
 - Engage in peer-to-peer mentoring and random coffee/buddy connections to encourage informal learning.
- 4. **Skill Awareness and Integration:**
 - Learn to recognize and appreciate different specializations within the library and health sciences communities.
 - Facilitate library-wide knowledge sharing through staff meetings, case studies, and role presentations.
 - Create resources such as a research guide, workshop, or library orientation on a specialized topic to benefit colleagues or patrons.

What Does Success Look Like?

1. **Short-Term:**
 - Completion of a specialized training program or bootcamp (e.g., Library Carpentries, systematic review workshop).
 - Presentation of a completed project demonstrating specialized skills.
 - Creation of a resource (e.g., research guide, instructional session) that reflects understanding and application of specialized knowledge.
2. **Mid-Term:**
 - Networking with professionals in specialized areas and leveraging connections for collaboration.
 - Delivery of a workshop or training session on a specialized topic within the librarian's institution.
3. **Long-Term:**
 - Active participation in external organizations or committees related to a specialized field (e.g., data management caucuses, systematic review groups).
 - Progression into a specialized role or additional responsibilities outside the current scope.
 - A demonstrated ability to connect specialized skills to institutional needs and emerging trends, contributing to the library's strategic goals.

Additional Notes:

- Specializations should be contextualized based on institutional roles and needs. Acknowledge differences in skill development depending on public vs. technical services, clinical support, or administrative roles.
- Emphasize the importance of understanding where to find resources and support for ongoing development.
- Onboarding into specialized skills should also address cultural adjustment to health sciences libraries and encourage awareness of available pathways for growth.

Core Competency #4: Practical Experience and Application

Goal: Apply knowledge and skills in real-world settings.

Resources:

1. Apprenticeship opportunities, internships, or job shadowing experiences.
2. NNLM connections to potential internship sites and collaborative projects.

Activities:

Internship/Apprenticeship:

- Participate in a structured apprenticeship to work on real projects and case studies.

Collaborative Projects:

- Work with interdisciplinary teams (e.g., researchers, clinicians) to understand their information needs.

Audience-Specific Framework:

1. First-Time Librarians:

- **Internal Resources:**
 - Training for library systems and applications: ILS, creating web pages/guides, reference question tickets, chat, statistics tracking, etc.
 - Library's skills training modules
 - Parent organization's training and development offerings
 - Repository of instruction materials
- **External Resources:**
 - Pairing librarians with libraries that specialize in health sciences.
 - Task forces in MLIS programs to introduce health sciences librarianship as a specialty.
 - Library Juice Academy (Intro to Health Sciences Librarianship).
 - Academic Impressions: Courses on academia and academic librarianship.
 - State-specific courses on fundamentals of higher education.
 - "What is Tenure" course.
 - Overview of AHIP and its relevance.
 - Introduction to organizations relevant to health sciences librarianship.
 - NNLM basics on searching PubMed.
 - Fellowships through NLM.

2. Librarians With General Experience (Not Health Sciences):

- **Internal Resources:**
 - Vendor webinars.
 - Peer shadowing.

- NNLM/MLA/ACRL webinars and classes.
- Database training.
- Meetings with departments/schools the librarian will work with.
- **External Resources:**
 - MLA/AAHSL (etc.) mentoring programs.
 - New-to-health sciences colleague connection or mentoring system.

3. Paraprofessionals in Transition to Professional Roles:

- **Internal Resources:**
 - Projects to bolster resumes (if permitted by union agreements).
- **External Resources:**
 - Internships and externships.

What does success look like?

1. Levels of independence achieved in practical tasks.
2. Ability to progress and work autonomously within a realistic timeline (e.g., one year).
3. Peer review feedback on activities demonstrating progress.
4. Ability to train or effectively demonstrate learned skills to others.
5. Development of a portfolio showcasing professional activities such as continuing education, projects, and other accomplishments.
6. Positive evaluations from collaborators highlighting effective communication and contributions to team goals.
7. Successful completion of an apprenticeship or internship with a documented portfolio of projects and reflections.

Additional Notes:

1. Develop a centralized, free internship/job board and toolkit.
2. Create a jargon lexicon or glossary for health sciences librarianship.

Core Competency #5: Professional Development and Lifelong Learning

Goal: Foster a commitment to continuous learning and professional growth.

Resources:

1. MLA webinars, workshops, and networking groups.
2. NNLM offerings for ongoing education and professional resources.
3. Internal institutional resources (e.g., training programs, educational reimbursement opportunities).
4. Basic skills training for non-medical library environments (e.g., ILLiad, OCLC).
5. Accessibility, Belonging, & Community training and programming.
6. Non-library resources, such as books on professional growth and mindset.
7. Glossary of acronyms to familiarize new professionals with common terms in health sciences librarianship.

Activities:

Self-Directed Learning:

- Create a personal development plan that includes specific, measurable goals for skill enhancement and areas of interest.
- Explore resources on growth mindset and long-term goal setting.

Professional Engagement:

- Join professional organizations (e.g., MLA) and actively participate in forums, committees, or networking groups.
- Attend webinars from MLA and other relevant associations.
- Participate in mentorship programs to gain insights into health sciences librarianship.
- Identify a mentor in health sciences librarianship for guidance and support.

Skill Building and Contribution:

- Develop skills in medical terminology and other specialized knowledge areas.
- Pursue writing, presentations, poster presentations, or book reviews, with structured opportunities to learn and practice these skills.
- Engage in professional development activities, adding them to annual appraisals and goal-setting processes.

What does success look like?

1. A well-defined personal development plan with specific, measurable goals.
2. Active involvement in at least one professional organization, contributing to discussions or committees.
3. Evidence of skill acquisition in areas such as medical terminology, technical tools (e.g., ILLiad, OCLC), and professional writing or presentations.
4. Successful participation in mentorship programs, either as a mentor or mentee.
5. Completion of webinars, workshops, or other educational activities, documented in annual appraisals.
6. Demonstrated growth mindset and progress toward long-term professional goals.
7. Contributions to the profession, such as presentations, publications, or active roles in professional organizations.

Additional Notes:

1. Budget Planning:

- Consider the costs of professional development activities and plan budgets to support fee-based opportunities.
- Explore free or low-cost alternatives where possible.

2. Mentorship:

- Include mentorship opportunities in job descriptions to emphasize their importance.

3. Faculty vs. Staff Status:

- Evaluate how faculty versus staff status affects access to professional development opportunities.

4. Career Pathways:

- For medical professionals transitioning into librarianship, consider contracts that include a requirement to obtain an MLS within a specified timeframe.

Core Competency #6: Reflection and Assessment

Goal: Assess progress and identify areas for further growth.

Resources:

1. MLA Competencies for self-assessment and reflection tools.
2. NNLM tools for evaluation and assessment in library services.
3. Local institutional resources, such as documentation for annual/tenure reviews and teaching reviews.
4. Additional resources to learn how to give, receive, and ask for feedback effectively.

Activities:

Reflective Journaling:

- Regularly document learning experiences, insights gained, and areas for growth.
- Use a checklist of agreed-upon reflection topics developed in collaboration with a supervisor.

Peer and Supervisor Review:

- Engage with peers, supervisors, and mentors to review work and provide constructive feedback.
- Practice bidirectional mentoring, where both parties learn and provide value to one another.

Growth Goals:

- Use assessment results to identify specific areas for improvement and create SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals.
- Establish a process to revisit these goals and track progress regularly.

What does success look like?

1. Consistent entries in a reflective journal demonstrating growth in knowledge, skills, and self-awareness.
2. Constructive feedback received from peers, supervisors, and mentors, showing a commitment to learning and improvement.
3. SMART goals set and regularly reviewed, with documented progress toward achieving them.
4. Evidence of applying feedback to make meaningful changes in work or professional practice.
5. Positive evaluations from local documentation sources, such as annual reviews or teaching evaluations, indicating professional growth and impact.
6. Active participation in innovative or best practice programs for early career librarians.

Additional Ideas and Best Practices:

1. Explore innovative methods for early career librarians, such as:
 - Structured peer mentoring programs.
 - Workshops or webinars on reflective practices and assessment techniques.
2. Incorporate feedback preferences to tailor mentoring and evaluation processes.
3. Close the feedback loop by documenting and acting on identified areas for growth.

Implementation Strategy

1. **Timeline:** Create a timeline for each phase, allowing flexibility for individual pacing.
2. **Evaluation Metrics:** Establish metrics for assessing knowledge, skills, and professional development.
3. **Support Systems:** Develop a support network including mentors, peers, and professional organizations.

This enhanced framework, now including NNLM as a critical resource, provides early-career health sciences librarians with a comprehensive path for developing their competencies and fostering professional growth. By utilizing these resources and engaging in hands-on experiences, they can build a robust skill set that prepares them for future challenges in the field.

Resources referenced in the Framework

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2. MUSC Libraries, [Evidence-Based Practice for Health Sciences Librarians](#)
3. NAHSL's [Health Sciences Libraries Apprenticeship Program](#), 2023
4. Medical Library Association Competencies [Competencies - MLA \(mlanet.org\)](#)
5. [Homepage | NNLM](#)
6. University of North Carolina at Chapel Hill, [Evidence-Based Practice for the Medical Librarian](#)
7. [We Here Community School](#)

Common Abbreviations in Medical and Health Libraries

AAMC - Association of American Medical Colleges

AAPOR - American Association for Public Opinion Research

ACRL - Association of College and Research Libraries

AFMC - Association of Faculties of Medicine of Canada/Association des facultés de médecine du Canada

AHIP - Academy of Health Information Professionals

ALA - American Library Association

AMIA - American Medical Informatics Association

APHA - American Public Health Association

CARL/ABRC - Canadian Association of Research Libraries/Association des bibliothèques de recherche du Canada

CHLA/ABSC - Canadian Health Libraries Association/Association des bibliothèques de la santé du Canada

CTSA Hub (Clinical and Translational Science Awards) Hub

HSLAP - Health Sciences Libraries Apprenticeship Program

IACUC - Institutional Animal Care and Use Committee

IRB/REB - Institutional Research Board or Research Ethics Board

MLA - Medical Library Association

MCMLA - Midcontinental Chapter of the Medical Library Association

NAHSL - North Atlantic Health Sciences Libraries, Inc.

NNLM - National Network of Libraries of Medicine

NLM - National Library of Medicine

PLA - Public Library Association

RDAP - Research Data Access and Preservation Association

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