A Model of Online Graduate Library Curriculum Development for Health Sciences Librarianship

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Curriculum Problems

THE ALA ACCREDITED LIBRARY SCIENCE PROGRAMS

- Insufficient or no health sciences librarianship (HSL) courses (Detlefsen, 2012).

- Outdated curriculum learning outcomes and nonspecific course content regarding the new professional fields and emerging roles of HSL (Wilson, 2008).

- Disconnection between general knowledgebases of librarianship and HSL specialized subject knowledge and expertise (Fikar, 2002; Polger, 2010).

- Lack of instructions on student career pathways regarding HSL professional trends and continuum of professional learning and development (Conway, 2016).
Objectives of the Study

A MODEL OF CURRICULUM DEVELOPMENT FOR HSL

• Propose a cross-disciplinary model of online graduate library curriculum development for HSL
  ➢ Identify the evolving core competencies of HSL
  ➢ Recognize the new demands and challenges required for the health sciences libraries
  ➢ Examine the emerging roles of HSL and the associated professional settings
Methodology
SYSTEMATIC REVIEW

➢ Journal Coverage:
  o LIS; HSL; health information technology; clinical practice, education, and research of biomedicine and health sciences

➢ Database Coverage:
  o LISTA, Wilson, ScienceDirect, EBSCO, PubMed

➢ Search Queries:
  o (health sciences librarian OR health sciences librarianship) AND role;
  o (medical librarian OR medical librarianship) AND role
Methodology
SYSTEMATIC REVIEW

➢ Search Result Filters:
  o Peer Reviewed Journals
  o Journal Articles
  o Publish Date: 2000-2016
  o English
  o North American

➢ Search Result: 563 Articles
Methodology

SYSTEMATIC REVIEW

- Removed duplicates and those not fitting the search criteria by way of citation management software—Endnote and Ulrich Serials Analysis System

- **Search Results:** 257 articles

- Access relevance and suitableness of those articles according to their research scopes

- **Search Results:** 110 articles
  - Emerging HSL roles
  - Professional settings and contexts
Core Competencies
THE MLA’S CODE OF ETHICS FOR HSL

➢ **Society:** promote equal access; support informed healthcare decisions

➢ **Clients:** meet library users’ information needs; protect user privacy and confidentiality; provide best available information resources

➢ **Institution:** perform quality library operation and services

➢ **Profession:** advance professional knowledge; build professional partnerships; uphold professional ideals, standards, and integrity

➢ **Self:** develop and maintain professional excellence and institution’s code of ethics and guidelines

Core Competencies
THE MLA’S SEVEN COMPETENCIES

Competencies for Professional Success: Health Sciences Information Knowledge and Skills

➢ Health Sciences Environment and Information Policies
➢ Leadership and Management
➢ Health Sciences Information Services
➢ Health Sciences Resource Management
➢ Information System and Technology
➢ Curriculum Design and Instruction
➢ Research, Analysis, and Interpretation

Retrieved from http://www.mlanet.org/p/cm/ld/fid=386
Core Competencies

THE SLA CORE COMPETENCIES & ENABLING COMPETENCIES

➢ Information and knowledge service
➢ Information and knowledge system and technology
➢ Information and knowledge resources
➢ Information and data retrieval and analysis
➢ Organization of data, information and knowledge assets
➢ Information ethics

• Enabling Competencies: critical thinking, problem solving, communication, collaboration, marketing, leadership, lifelong learning, instructional design, business ethics

Retrieved from http://www.sla.org/about-sla/competencies/
Results of Data Analysis

ROLES OF HSL & PROFESSIONAL SETTINGS

• Embedded HSL emerges as a standout theme with a focus on the role of a partner, collaborator, and liaison rather than a supporter, information provider, or simply information outreach. Some examples of expanded settings include:

  ➢ **Clinics or Hospitals:** complementary and alternative medicine librarian, expert information searcher, instructor, content manager, patient advocate, clinical informationist/informatician, technology assistant, data management supporter

  ➢ **Academic or Biomedicine Research:** researcher of evidence-based medicine or practice, systematic reviewer, grant writer, data analyst

  ➢ **Biomedical or Health Sciences Education:** evidence-based medicine/practice instructor, electronic health record researcher, online education instructor /facilitator

  ➢ **Public Library or Community/Public Health Initiatives:** consumer health librarian, consultant, collection developer, researcher, expert information searcher
Results of Data Analysis

ROLES OF HSL & PROFESSIONAL SETTINGS

• HSL is rapidly growing and adapting to the health information technology advancement and implementation of these practices. Some examples of those emerging professional settings are:

  ➢ **Health or Biomedical Informatics:** clinical informatics; research and education of health informatics or medical informatics, bioinfomaticans/translational informatics

  ➢ **Data Management:** data science engagement in managing institutional data repository, standards, and preservation

  ➢ **EMR/EHR Support:** participation of EMR implementation training for both healthcare providers and patients

  ➢ **Online Instruction:** online curriculum design, online instruction for problem-based learning and evidence-based practice
Results of Data Analysis

ROLES OF HSL & PROFESSIONAL SETTINGS

• More demands and challenges that health sciences libraries face has redefined and transformed the roles of HSL.

➢ Disaster Management: disaster management librarians with specific skills and training as a center of connection point during emergency situations.

➢ Digital Initiatives: blended librarian for reliable and quality online health information resource provision and traditional library collection management.

➢ Management of Data, Information, and Knowledge: librarians as knowledge workers engaging in acquisition, analysis, and manipulation of data, information, and knowledge.
Results of Data Analysis

ROLES OF HSL & PROFESSIONAL SETTINGS

• A broad foundation of HSL roles and the professional values include:

  ➢ **Transferrable competencies** of general library information management and services

  ➢ **Specialized health information knowledgebases and skill sets** that are adapting to the fast growing and innovative clinical practice, research, education of biomedicine and health sciences

  ➢ **Core profession values** of promoting informed decisions in healthcare, best available health information resources, and excellence of professional services

  ➢ **Continuum of professional learning and development** that is pivotal to equal access and informed decisions by healthcare professionals, educators, students, researchers, and public
A Model of Curriculum Development for HSL

General Librarian Competencies
- MLA’s Code of Ethics for HSL
- SLA Core Competencies & Enabling Competencies
- MLA’s Seven Competencies

Curriculum
- Learning Outcomes
- Course Content
- Delivery Approaches
- Student Career Pathways Instruction
- Subject Knowledge
- Specialized Expertise

Continuum of Professional Learning

Professional development

Professional Settings

Roles of HSL
- Biomedical Informationist
- Systematic Reviewer/Grant Writer
- Liaison
- Online Instructor
- Data Science Manager
- Informatician
- EMR/EHR Librarian
- Patient Advocate/Instructor
Conclusions

• The study indicates the changes and adaptations necessary to the roles of HSL in the intellectually and technologically sophisticated context of healthcare.

• Linking the recognized fundamental professional competencies to those emerging diverse roles will well inform the learning outcomes of the LIS curricula for HSL.

• Identifying the versatile, innovative, and challenging professional contexts and practice will enrich the design of online course delivery content and strategies.

• This proposed model will provide a career pathway guide to potential library students who attempt to pursue HSL as their learning objective and career goal.
Future Study
A SECOND-PHASE STUDY

• Examine the model of online library curriculum development by a follow-up study of job posting analysis and employer interviews.

• Further identify the required knowledge and skills for an entry-level health science librarian by text mining and analyzing the HSL job postings across the country during 2010-2016.

• Conduct a purposive sample of structured employer interviews to specify what knowledgebases, subject knowledge, and specialized expertise that a new health science librarian is expected to attain within the graduate library study.

• Map the findings to the model to complement and enrich the specified core competencies of HSL across the recognized new streams of professional settings and their innovative practices.
Selected References


Conway, A. (2016). Medical school librarians need more training to support their involvement in evidence based medicine curricula. *Evidence Based Library & Information Practice, 11*(2), 201-203.


Selected References


Selected References


Sathe, A., Jerome, R., & Giuse, B. (2007). Librarian-perceived barriers to the implementation of the informationist/information specialist in context role. *Journal of the Medical Library Association, 95*(3), 270-274. doi:10.3163/1536-5050.95.3.270
