



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- Outdated curriculum learning outcomes and nonspecific course content regarding the new professional fields and emerging roles of HSL (Wilson, 2008).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

- LIS; HSL; health information technology; clinical practice, education, and research of biomedicine and health sciences

### ➤ **Database Coverage:**

- LISTA, Wilson, ScienceDirect, EBSCO, PubMed

### ➤ **Search Queries:**

- (health sciences librarian OR health sciences librarianship) AND role;
- (medical librarian OR medical librarianship) AND role



# Methodology

## SYSTEMATIC REVIEW

- **Search Result Filters:**
  - Peer Reviewed Journals
  - Journal Articles
  - Publish Date: 2000-2016
  - English
  - 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 suitability of those articles according to their research scopes
- **Search Results: 110** articles
  - Emerging HSL roles
  - Professional settings and contexts

# Methodology

## ENDNOTE & ULRICHS



Author	Year	Title
Wilson, Virginia	2008	Academic Librarians Have Concerns about Their Role as Teachers
Desmeules, Robl...	2016	Acknowledging Librarians' Contributions to Systematic Review Searching
Blake, L.; Meers, ...	2014	Adapting an embedded model of librarianship, college by college
McMullen, Kare...	2013	Adapting to Change: A Survey of Evolving Job Descriptions in Medical Librari...
Ajwonu, Grace A.	2006	Alternative Strategies for HIV/AIDS Information Dissemination in Nigerian ...
Brown, Marcy L.	2008	Analyzing Performance: Training Isn't Always the Answer
Brown, Marcy L.	2008	Analyzing Performance: Training Isn't Always the Answer
Vucovich, Lee A...	2008	Analyzing the impact of an author's publications
Vucovich, Lee A...	2008	Analyzing the impact of an author's publications
Burdiana, Seve...	2004	And They Were There -- Charleston Conference 2004
Burdiana, Seve...	2004	And They Were There -- Charleston Conference 2004
Hatfield, Amy J; ...	2004	Angel: Post-Implementation Evaluation at the Indiana University School of ...
Joc, Karen; Tho...	2006	Application and Usage of Wireless PDAs in a First-Year Medical Curriculum
Joc, Karen; Tho...	2006	Application and Usage of Wireless PDAs in a First-Year Medical Curriculum
Beales, Donna L.	2012	Areas for Improvement in Medical Library Advocacy: In Our Own Words
Kean, Emily B.	2013	Assessment and impact of a new role as an embedded librarian in nursing on...
Kean, Emily B.	2013	Assessment and impact of a new role as an embedded librarian in nursing on...
Creamer, Andre...	2011	Assessment of health sciences and science and technology librarian e-scienc...
Shedlock, James...	2003	The Association of Academic Health Sciences Libraries Annual Statistics: a th...
Shedlock, James...	2003	The Association of Academic Health Sciences Libraries Annual Statistics: a th...
Iskier, Carl G.	2003	The Association of Academic Health Sciences Libraries collaboration with th...

Reference Type:	Journal
Rating:	.....
Author:	Wilson, Virginia
Year:	2008
Title:	Academic Librarians Ha
Journal:	Evidence Based Library J
Volume:	3
Issue:	3
Pages:	73-75
Start Page:	
Epub Date:	
Date:	
Type of Article:	Article
Short Title:	
Alternate Journal:	



Search Workspace Ulrichs Update Admin

Enter a Title, ISSN, or search terms to find journals or other periodicals

Assessment and impact of a new role as an embedded librarian in nursing online journal clubs

Advanced Search

### Narrow Results

#### Key Features

- Sort: Count | 0000
- Abstracted or Indexed (81874)
- Website URL (26412)
- Refereed / Peer-reviewed (43830)
- Available Online (43059)
- Copyright Clearance Center (CCC) (39254)
- Table of Contents (13296)
- Electronic-only (11688)
- Journal Citation Reports (8023)
- Open Access (6278)
- Magazines for Libraries review (5027)

World Journal

1 - 25 of 182,327 results for: Assessment and impact of a new role as an embedded librarian in nursing online journal clubs

	Title	Publisher	ISSN	Country	Status	Serial Type	Format
<input type="checkbox"/>	Nursing Praxis in New Zealand	Nursing Praxis in N.Z.	0112-7420	New Zealand	Active	Journal	Print
<input type="checkbox"/>	Impact	Future Technology Publications	2052-0880	United Kingdom	Active	Journal	Online
<input type="checkbox"/>	NDJ	Bowling Green State University	0077-8206	United States	Ceased		Print
<input type="checkbox"/>	NEJM Journal Watch, Cardiology (Online)	Massachusetts Medical Society		United States	Active	Abstract/Index, Database	Online
<input type="checkbox"/>	NEJM Journal Watch, Dermatology (Online)	Massachusetts Medical Society		United States	Ceased	Abstract/Index, Database	Online
<input type="checkbox"/>	NEJM Journal Watch, Gastroenterology (Online)	Massachusetts Medical Society		United States	Active	Abstract/Index, Database	Online
<input type="checkbox"/>	NEJM Journal Watch, Neurology			United States		Abstract/Index	



# 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, bioinformatics/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.

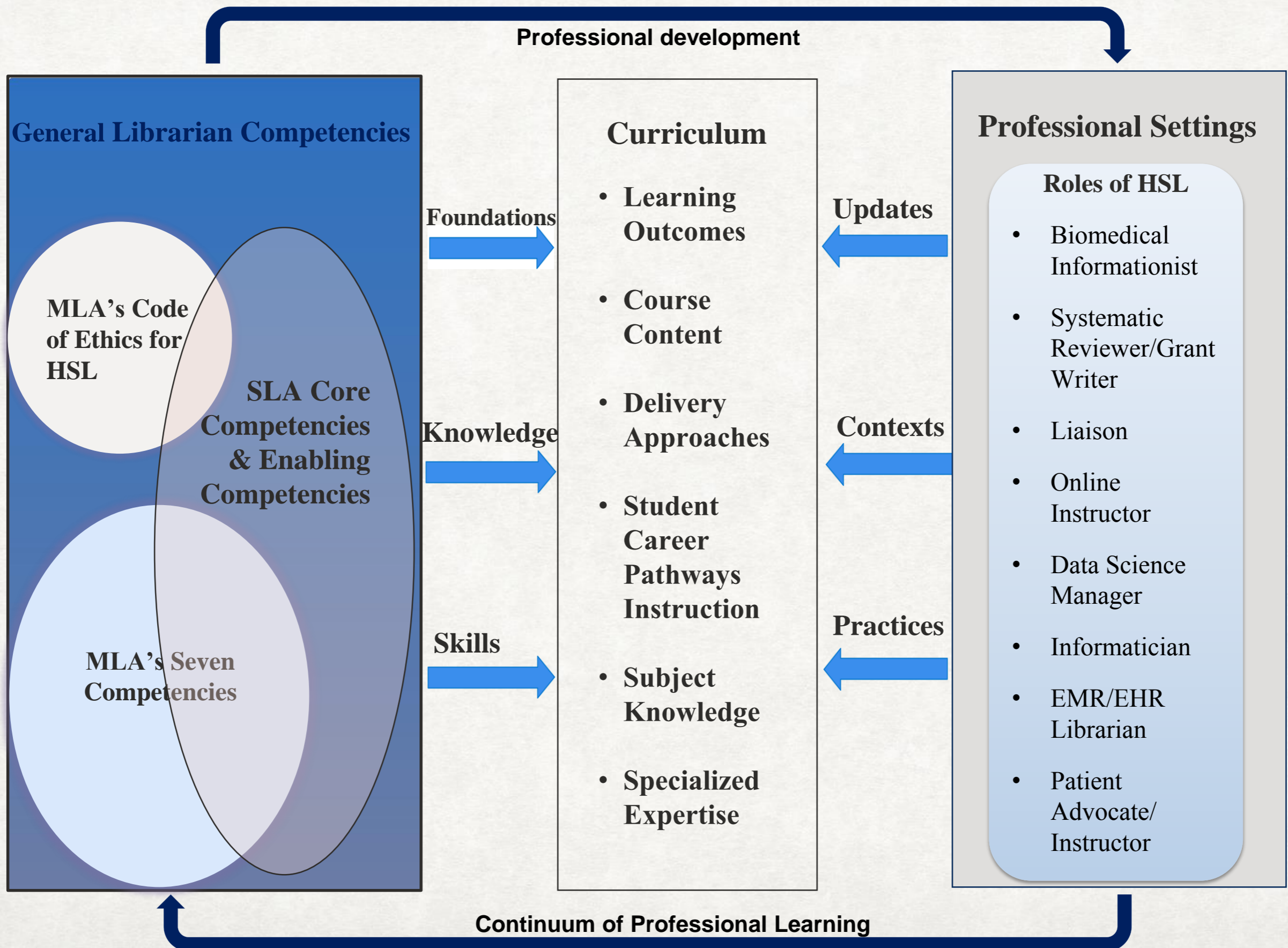


# Results of Data Analysis

## 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



# 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

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# Questions?



For more information about 2016 MeSH, see *What's New for 2016 MeSH* and the *Introduction to MeSH – 2016*.

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