What skills do library staff needs in the digital age?

Eloy Rodrigues
The context(s)
The library context

Social and community dimensions

Open, available and useful to ALL
“Bad Libraries Build Collections, Good Libraries Build Services, Great Libraries Build Communities” – David R. Lankes

From “consumption” to “creation”

Adding value to and promoting the knowledge generated or existing in the communities they serve
“The “inside-out library”” - Lorcan Dempsey
The wider context

• Disintermediation (reduction of human intermediation)

• Digital transformation (SMACIT technologies: social, mobile, analytics, cloud, and Internet of Things)

• Emergence and generalisation of Artificial Intelligence
  • IA use on service provision
  • Direct (generative) IA use by the general public
Library staff skills and competences in/for the digital age

From reference documents
CILIP Professional Knowledge and Skills Base (PKSB)

Core Principles

• Ethics and values
• Professional development
• Organisational and environmental context
• Wider library, data, information and knowledge sector context

CILIP Professional Knowledge and Skills Base (PKSB)

Professional Expertise

- Collection management and development
- Data management
- Information exploitation and use
- Information governance and compliance
- Information management
- Knowledge management
- Literacies and learning
- Records management and archiving
- Research

CILIP Professional Knowledge and Skills Base (PKSB)

**Generic Skills**

- Customer focus, service design and marketing
- Leadership, advocacy, influencing and personal effectiveness
- Strategy, planning and management
- Technology and communication

ALA’s Core Competences of Librarianship

1. Gateway Knowledge
2. Information Resources
3. Lifelong Learning and Continuing Education
4. Management and Administration
5. Organization of Recorded Knowledge and Information
6. Reference and User Services
7. Research and Evidence-Based Practice
8. Social Justice
9. Technological Knowledge and Skills
ALA’s Core Competencies of Librarianship

1. Gateway Knowledge

1A. Employ the ethics, values, and foundational principles of the library profession.

1B. Promote democratic principles and intellectual freedom (…).

1F. Identify social, public, information, economic, and cultural policies and trends of significance to the library and information profession (…).

1G. Understand the legal framework in which libraries operate, including laws relating to copyright and fair use, privacy, freedom of expression, equal rights (…).
IFLA’s Foundational Knowledge Areas (FKAs)

What skills do library staff needs in the digital age?
My view...

Core Values/Principles

Professional/LIS competencies

"Soft Skills"

Technological/Digital competencies
Core Values/Principles

Core Values of Librarianship (ALA, Updated January 2024)
  • Access
  • Equity
  • Intellectual Freedom and Privacy
  • Public Good
  • Sustainability
Professional/LIS competencies


The six elements of this framework are:

- Digital proficiency and productivity (functional skills)
- Information, data and media literacies (critical use)
- Digital creation, problem solving and innovation (creative production)
- Digital communication, collaboration and participation (participation)
- Digital learning and development (development)
- Digital identity and wellbeing (self-actualising)
“Soft Skills”

Communication, networking, team-working, empathy, persuasion/advocacy, etc., etc.

Lorcan Dempsey argues that in the library context, “soft” skills are in fact “core”, and suggest to use CORE skills (to refer to Communication, Relational and Empathy).


Also Emy Nelson Decker’s references the use of CORE (by Parlamis and Monnot, 2019) to designate Competence in Organizational and Relational Effectiveness.

Concluding Remarks
The current challenges

• Environmental and Societal challenges (migrations, inequalities, polarized societies).

• Technological evolution, especially IA, will (continue to) have a tremendous impact in our profession and organizations.
## AI impacts on library operations

<table>
<thead>
<tr>
<th>AI application...</th>
<th>impacts...</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI to make collections machine readable data and describe them at scale</td>
<td>Collections team, Special collections, Archives team</td>
</tr>
<tr>
<td>AI to enhance or create metadata</td>
<td>Metadata team</td>
</tr>
<tr>
<td>Discovery/retrieval, literature reviews</td>
<td>Library systems, liaison team</td>
</tr>
<tr>
<td>Supporting data scientist communities</td>
<td>Liaison team</td>
</tr>
<tr>
<td>AI generated text and images</td>
<td>Marketing team</td>
</tr>
<tr>
<td>Library or institutional chatbot</td>
<td>User services</td>
</tr>
<tr>
<td>AI in backend systems, e.g. RPA (Robotic Process Automation)</td>
<td>Library systems</td>
</tr>
<tr>
<td>Use of robots to give information to users</td>
<td>User services</td>
</tr>
<tr>
<td>Smart spaces</td>
<td>Facilities team</td>
</tr>
<tr>
<td>Use of robots to tidy shelves</td>
<td>Collections team</td>
</tr>
<tr>
<td>Supporting student use of AI tools</td>
<td>Academic services</td>
</tr>
<tr>
<td>Need for AI literacy (including data and algorithmic literacy) of users</td>
<td>Training team</td>
</tr>
<tr>
<td>Analysing and predicting user behaviour</td>
<td>Planning team</td>
</tr>
</tbody>
</table>

Table 1 AI impacts on library Operations
IFLA. Developing a library strategic response to Artificial Intelligence - [https://www.ifla.org/g/ai/developing-a-library-strategic-response-to-artificial-intelligence/](https://www.ifla.org/g/ai/developing-a-library-strategic-response-to-artificial-intelligence/)
Roles for librarians in the AI context

Martin Frické suggests that Librarians can be

• **Synergists**
  - Intellectual Freedom
  - Improving Intermediation Between Users and Information Resources
  - Improving Traditional Cataloging, Classification, and Retrieval Tools
  - Release, Produce, Curate, or Inspire the Production of Training Data.
  - Social Epistemology (Social epistemology faces problems aplenty nowadays with disinformation, misinformation, fake news, deep fakes and the like)

• **Sentries**
  - Copyright and intellectual property
  - Bias management
  - Monitoring techniques to improve search
  - Intellectual freedom
  - Inadvertent censorship

• **Educators**
  - Information Literacy
  - Data Literacy, Data Science Fluency, and AI Literacy
  - More Intelligent Consumers of Information
  - Better Informed Citizens

• **Managers**
  - AI can improve the running of libraries
  - Workflow and Improving Service (ML cataloging, personalization, recommender systems, better search, chatbots for customer service, predictive analysis for collection management)
  - Optimize the Use of Space (and, Indeed, Other Resources)

• **Astronauts**
  - Creating Knowledge
  - Drawing out Knowledge

Some questions we should consider (from Chris Bourg)

1. What role can libraries play in making sure we don’t summon the demon; or at least that we have the tools to control or tame the demon?

2. How might we leverage AI in support of our missions? How might AI help us do some of our work better?

3. How might we support AI and machine learning in ways that are consistent with and natural evolutions of the long-standing missions and functions of libraries as sources of information and the tools, resources, expertise to use that information?

Bourg, Chris. “What Happens to Libraries and Librarians When Machines Can Read All the Books?” Feral Librarian (blog), 2017. 
https://chrisbourg.wordpress.com/2017/03/16/what-happens-to-libraries-and-librarians-when-machines-can-read-all-the-books/
We must ensure that the same tech giants that embraced confrontation for engagement don’t use AI to isolate and disconnect
What skills do library staff need?

• **The combination of skills that library professionals must possess to face the current challenges is broad and very dependent on the context in which they work (academic, public or other type of library).**

• Although **new technological skills are undoubtedly needed, and “soft”/CORE skills are critical, traditional competences, related to the evaluation, organization and representation of information, and in particular the fundamental ethical values of the profession, such as the quality and reliability of information, openness, freedom and public service orientation, will remain relevant and indispensable.**
LIBER’S VISION FOR RESEARCH LIBRARIES IN 2027

DRIVING FORCES

Engaged & trusted hubs

State-of-the-art Services

Advancing Open Science

FUNDAMENTAL PRECONDITIONS

Upholding rights & values

Upskilling the library workforce
Thank you!