Critical Analysis and Evaluation of the Textbook "Management of Digital Libraries: A Practical Guide" Based on the Standards and Criteria of University Textbooks

Abstract

Purpose: The purpose of this paper was to critically analyze the textbook "Management of Digital Libraries: A Practical Guide" written by Mitra Samiei (2023) from Chapar Publications and evaluate it based on the standards and criteria of university textbooks.

Methodology: This was an applied research study in terms of purpose and mixed-method in terms of approach, which used critical qualitative analysis and descriptive survey. A checklist was employed for qualitative evaluation of the content and formal structures of the textbook on a 5-point Likert scale.

Findings: According to the analysis results, the textbook scored 54/70 (72%) for formal criteria, which was acceptable. In contrast, it scored 40/70 (53.33%) and 47/70 (67.14%) for structural and writing criteria, respectively, which were unacceptable. It scored 66/95 (69.47%, almost 70%) for content criteria. In general, the textbook under criticism can be suitable and practical for students as a work that collects all the materials available in digital libraries by solving the stated problems.

Conclusions: Among the factors that can help improve the present work are modifying photo captions, the publisher's innovative cover design, footnotes for jargon, required persons and concepts, citations, glossary and index, and a list of tables and figures. Therefore, the author is recommended to provide practical examples and new instances, employ up-to-date sources, reduce textbook volume, and avoid duplicate content to improve the current work in the next editions. Also, among the strengths of this textbook is a separate chapter dedicated to digital librarianship, organizational structure, human resources in digital libraries, and the author's credibility and expertise.

Keywords: Digital libraries, Critical analysis, University textbook

Introduction

Nowadays, the web has provided an environment for everyone to share information. With an increase in the volume of full-text digital information and web-based library services, a new

generation of libraries appeared through the use of web tools called digital libraries, which provide users with digital content (Alipour-Hafezi, 2019). Such libraries are created by using different techniques and measures to collect, process, and propagate digital content under digital library management.

Digital library management refers to collection development, cataloging, indexing and classification, information access, public services, employee organization, and management, technologies and infrastructures, standards and information exchange, and copyright protection (Tennant, 2004; cited in Alipour-Hafezi, 2018). Considering the extensive and specialized tasks in digital libraries, their technical dimensions and theoretical framework should be taken into consideration. Thus, domestic and foreign researchers have compiled well-established works for the scientific community in the subject area of digital libraries.

The work "Management of Digital Libraries: A Practical Guide" was written in fifteen chapters with two appendices, a glossary, and an index in 627 pages by Mitra Samiei, a faculty member in Allameh Tabataba'i University, by Chapar Publications in 2023, to fulfill the needs of scientist audience.

The first chapter examines the basic concepts of digital libraries, including digital content, digital objects, limitations of digital libraries, etc. The second chapter addresses the concept of digital librarianship. The third chapter is dedicated to collection development in digital libraries, including the concepts, stages, and selection of digital collections, along with the policies and provision methods. Information protection and security, including digital preservation standards, are stated in the fourth chapter. Chapter 5 lists digital library standards, including textMD, RDA, PREMIS, MODS, etc. The sixth chapter explains how to organize digital libraries and discusses modern knowledge organization systems, including ontologies, linked data, metadata, BIBFRAME Model, etc. The seventh chapter describes technical and public services, including digital trust and reference, under the title of digital library services. The eighth chapter addresses the user interface, its features, the factors affecting its design, and its design and evaluation models in digital libraries. Ethical principles (code of ethics and its principles) in digital libraries are stated in the ninth chapter. The tenth chapter discusses digital rights management (DRM), including copyright, copyright situation around the world, copyright law, copyright and digital libraries, and copyright and privacy policy. The eleventh chapter explains how to use technologies in DRM, including DRM concepts and related technologies. The twelfth and thirteenth chapters deal with human resources and evaluation in

digital libraries. Digital library software, including Persian commercial software, is addressed in the fourteenth chapter. Finally, the fifteenth chapter explains the organizational structure of digital libraries, including examples of the organizational structure of digital libraries in the world and its proposed example for the digital library of Imam Sadiq University Girls' Campus. At the end of the textbook, two appendices are presented, including the IFLA-UNESCO Public Library Manifesto for digital libraries, and the features of Azarsa and Simorgh software are compared with references.

Those interested in the field of digital libraries, including researchers, students, teachers, managers, and designers, can benefit from this textbook. It can also be applied as a source for undergraduate and graduate students of information science and epistemology in various subfields, including digital library management.

Since the digital library management subfield is in its infancy in Iran, more relevant, useful sources should be compiled to familiarize students with the digital library environment as digital librarians and increase their awareness of digital information.

The author didn't mention the academic audience in the book's introduction, of course. Thus, it may not be feasible to evaluate and critique it in the same way as a textbook's structure. However, due to the comprehensiveness of the book, the author's expertise in the field of preservation and digital libraries and the importance of the subject of the book were reviewed and evaluated. Hence, this paper evaluated and critically analyzed the mentioned textbook in terms of form, structure, writing style, and content.

Research background

This section analyzes studies and sources on the evaluation of university textbooks in the field of digital libraries and related topics (Table 1).

Table 1. A descriptive image of the conducted studies

Author(s)	Subject	Method	Conclusion
Zerehsaz (2013)	A review of the textbook "Digital Libraries: User Interface."	Analytical	This work has a special position and importance as one of the few existing works about user interfaces in Persian. In general, it is expected that the degree to which the author analyzes is proportional to the degree to which the materials are quoted from other specialized reference sources in the works of authorship. Unfortunately, this proportion has not been observed to a large extent in this work. Most of the material presented in the textbook is quoted from other sources and previous studies, and the author has provided fewer comprehensive analyses except those related to his doctoral dissertation.
Radfar & Noori (2015)	A review of the textbook "Digital Libraries: Information Exchange."	Analytical approach	This textbook is reviewed in two areas: formal and content. Among the strengths of this work are being research-based, using numerous and diverse authentic scientific sources, and the author's scientific reputation. Among its weaknesses are some intricate content and writing due to its high level of expertise and jargon, and some writing and editing problems.
Norouzi (2016)	A review of the textbook "Protection in Digital Libraries."	Analytical approach	The current textbook offers the necessary arrangements for digital preservation and guaranteeing information access by reviewing various texts and sources, using the outputs of reputable international organizations and institutions, and the experiences of national libraries in leading countries. It also addresses the challenges and related studies conducted to increase awareness at the national and expertise levels.
Papi (2023)	A critical review and evaluation of the Textbook "Designing the Digital Library."	Mixed-method approach	The author's expertise in the field can be mentioned as the main strength of the book. The textbook is the only work in Persian in the field of designing digital libraries. A separate chapter on legal and rights issues in digital libraries can also be considered as another positive point of this work. At the same time, this work also has notable points for improvement, the most important of which are editorial rules and writing points. In general, the work in hand in terms of evaluation in formal, writing, structural, and content criteria received scores of 46,

			46, 63, and 63, respectively, and achieved at least 70 percentage points, making it a desirable book for its audience.
Jamali-Zavare, Nasr, Nili and Armand (2008), Razi (2009), Yar-Mohammadian, Armand, Zare'i (2009), Hoseini and Matoor (2012), Gharagozlu Farhad, Soleimani and Armand (2017), Nili-Ahmadabadi and Dana (2017), Armand (2020), Shahlai, Safar-Navade, Armand and Moosapoor (2021), Refahi Kamsari, Asnafi and Haji Zeinolabedini (2022), Mahmood (2011) and Regan and Ryan (2011)	Desirable criteria and features of university textbooks	Analytical approach	Among these criteria are formal, content, methodological, linguistic, structural, performance (informational, transformational, systematic, etc.). Other textbook assessment criteria include curriculum policy and scope, text reliability, vocabulary, illustrations and format, horizontal and vertical alignment of the text, cognitive development, critical and creative learning, assessment and evaluation (exercises, questions, etc.), and so on.

Summary of research background

Some textbooks on digital libraries were criticized mainly based on content and formal structure by browsing and searching different study databases such as Zerehsaz (2013), Radfar & Noori (2016), Norouzi (2016), and Papi (2023). According to Table 1, various studies have presented the criteria of university textbooks, including formal, content, methodological, linguistic, and structural criteria. The above criteria have been exploited to criticize and evaluate the present textbook. A qualitative review of university textbooks can help revise and provide higher-quality academic content.

Research method

This was an applied research study in terms of purpose and mixed-method in terms of approach, which used critical qualitative analysis and descriptive survey methods. A checklist was employed to evaluate the content and formal structure of the current textbook. The checklist above was compiled using various sources and studies and was not limited to a specific checklist. To guarantee a comprehensive checklist and the quality of the research and achieve logically unbiased results, the results of the studies of Jamali-Zavare, Nasr, Nili, and Armand (2008), Regan and Ryan (2011), Razi (2009), Yar-Mohammadian, Armand, Zare'i (2009), Mansooriyan (2013), Gharagozlu Farhad, Soleimani and Armand (2017), Nili-Ahmadabadi, Dana (2017), Hoseini and Matoor (2012), and Refahi Kamsari, Asnafi and Haji Zeinolabedini (2022) were used. The checklist included formal criteria (15 items), structural criteria (15 items), content criteria (19 items), and writing criteria (14 items). The items were evaluated on a 5-point Likert scale. According to the criteria presented in Jamali-Zavare, Nasr, Nili, and Armand's (2008) research, a textbook is considered acceptable (desirable) if it has scored at least 70% in the mentioned criteria. Therefore, in the current research, this textbook is considered acceptable, with a score of 52.5/70 for formal and structural criteria, 66.5/70 for content criteria, and 49/70 for writing criteria.

Findings

Critical analysis and descriptive survey methods were used for critical analysis of the textbook "Management of Digital Libraries: A Practical Guide." This research used the evaluation criteria of university textbooks, including formal, structural, writing, and content criteria, to evaluate the work above. For a qualitative analysis, the textbook was first analyzed text-based and then evaluated based on the mentioned criteria.

A) Formal criteria

The textbook was evaluated in terms of formal criteria and scored 54/70 (72%), which was acceptable. However, it requires a series of (front and back) cover changes and innovations. In general, among the criteria used were paper, cover, binding, page layout/format, illustrations, and handwriting (script). As can be seen, a binary code has been applied on the cover, and the textbook content is not properly reflected on the front cover. The back cover only contains the English translation of the title and the author's name. Expressing an abstract on the back cover can help better introduce the work to the audience and play a significant role in its promotion. Besides, some illustrations used are not of high quality. For example, the caption of Fig. 1-7 in

Chapter 7 (p. 252) and Figs. 9-5 and 5-12 in Chapter 5 (pp. 170 and 181) is illegible. Also, in Fig. 2-14 (p. 552), the color used in the table makes the font hard to read.

Table 2. Evaluation checklist of the textbook under review according to formal criteria

N.	Formal features	Very much (5)	Much (4)	Moderate (3)	Low (2)	Very low (1)
1	Type of paper used		4			
2	Illustrations and figures inside			3		
3	Enough margins for taking notes		4			
4	Cover material as to its format and size		4			
5	Book size as to its readers and subject	5				
6	Book cover design as to its attractiveness and matching to content			3		
7	Fair use of colors on book cover			3		
8	Enough line spacing between words, lines, and paragraphs		4			
9	Text font sizes		4			
10	Title and sub-title font sizes		4			
11	Proportions between title, text, and footnote font sizes		4			
12	Font readability		4			
13	Spine strength		4			
14	Introduction on the back cover					1
15	High image quality			3		
	Total score: 54 (72%)	5	36	12	-	1

Acceptable work: scored 52.5/75

b) Structural criteria

The current textbook scored 40/70 for the structural criteria, which was unacceptable. Failure to provide a glossary, an index, and a list of tables and figures are among the indicators not addressed in the work, which obtained the lowest score. The subject index is the most common one, which helps guide the audience better and provides more details of the work. Since this work can serve as a good source for students, a guide should be provided at the beginning of each chapter, and questions should be formulated at the end.

Table 3. Evaluation checklist of the textbook under review according to structural criteria

N.	Structural features	Very much	Much	Moderate (3)	Low (2)	Very low (1)
1	Expressive and clear titles and subtitles in reflecting the problem (Appropriate ratio between main items and secondary items)		4			
2	Having a preface or an introduction at the beginning of the textbook	5				
3	Concise table of contents	5				
4	Expanded table of contents	5				
5	List of tables and figures					1
6	Readers' guide					1
7	Mentioning the detailed objective of each chapter					1
8	Introduction preceding each chapter	5				
9	Concluding remarks at the end of each chapter	5				
10	Reference list at the end of each chapter					1
11	Further readings at the end of each chapter					1
12	Glossary [at the end of the textbook]					1
13	Index [at the end of the textbook]					1
14	Questions and opportunities for skill learning and exercise solving (Questions and exercises for students)					1

N.		Very much	Much	Moderate (3)	Low	Very low
15	Logical organizations in order of chapters			3		
	Total score: 40 (53.33%)	25	4	3	-	8

Acceptable work: scored 52.5/75

c) Writing criteria

The current textbook scored 47/70 (67.14%) (lowest possible score: 49) for writing criteria, which was unacceptable. One of the indicators not considered in this work was the failure to use English equivalents for terms, concepts, and names of persons in footnotes, which led to ambiguity in the text. All jargon and names of non-Iranian persons are expressed in Persian without footnotes. This makes it difficult for the audience to search for terms and concepts; for example, on p. 153, the English equivalent "object characteristics extension"; on p. 155: "digital storage"; on p. 339: "Graham Cornish"; on p. 425: "Zhou," and so on.

Moreover, the font of some words is small compared to other words. For example, on p. 333, the third paragraph, the word copyright, or on p. 334, the second paragraph, the third line, the word "will…".

Another example that the editor or author has neglected is mentioning a part of an article where the word "article" has not been removed. On p. 150, the last two lines of the introduction read that "this article was used to introduce and present the standards...". According to the book text, this section is taken from the textbook author's article, in which the word "article" is stated exactly.

According to the textbook volume, it was expected that there would be more spelling and writing mistakes (misspellings); a very small number of spelling and writing mistakes for such a textbook is among its advantages.

Table 4. Evaluation checklist of the textbook under review according to writing criteria

N.	Writing features	Very much	Much	Moderate (3)	Low (2)	Very low (1)

#	Criterion					
1	Definition of special terms, jargon, and unfamiliar concepts			3		
2	English equivalents (preferably in footnotes)					1
3	Readers-assisted writing		٤			
4	Punctuation			3		
5	Proportion between the levels of text difficulty and the audience (Readability for readers)			3		
6	Proportion between the volume of main and secondary information			3		
7	Scientific writing		4			
8	Persian grammar			3		
9	Persian spelling		4			
10	Avoiding over-explanation and unnecessary synonyms (Avoiding abundance)			3		
11	Originality in quotations		4			
12	Logical length of paragraphs		4			
13	Logical length of sentences and avoiding overuse of compound sentences		4			
14	Coherence and unification of the text		4			
	Total score: 47 (67.14%)	-	28	18	-	1

Acceptable work: scored 49/70

d) Content criteria

The current textbook scored 66/95 (almost 70%) for content criteria. The English sources used were up-to-date. Very few sources published in English in the last seven years on digital libraries were utilized in textbooks. Since the publisher is not among academic or government publishers, professional and specialized review of published textbooks is difficult. The professional review will greatly help increase the textbook's quality and make it more readable.

In addition, the author used a lot of material from the reference Azargoun and Farizadeh (2020) on pp. 156-163. Nevertheless, the materials have been cited, but different English sources on the Functional Requirements for Bibliographic Records (FRBR) conceptual model should have been used. In another example, in Chapter 10, the translation of parts of Agnew's book (2018) is mentioned, but the names of the translators are wrongly stated in the citation as Samiei and Papi (2018). Similarly, almost 40 pages of this chapter have been adapted from the mentioned textbook in this same chapter, while other sources should have been used. Also, on some pages of the textbook, including pp. 393, 396, 394, and 400, materials about encryption (encoding) and other technologies have been adapted from Wikipedia (Wikipedia lacks scientific credibility as a collaborative online encyclopedia). Therefore, it would have been better to use the available authentic Persian and English sources, considering the many available sources on the topic under discussion.

Although the tenth chapter discusses DRM, the rights management of digital works is addressed. Concepts should be used consistently. Also, the eleventh chapter (under the title of Using Technologies in the Management of Digital Works Rights) can be merged with the tenth chapter, under the title of "Digital Rights Management (DRM)."

The analysis of the textbook on the citations used showed that some materials were not cited, for example, privacy and libraries (pp. 381 and 382). Moreover, Karen Coyle correctly points out that "rights management..." at the end of the quote, the date and page of the source are not stated (bottom line of p. 385). The definition of "…evaluation concept" is not cited (pp. 400, 401, and 444).

Two appendices are given at the end of the textbook before the reference list. The first appendix (p. 571) contains a translation of the IFLA Statement, but the original source is not cited. In the second appendix (p. 577), the features of Azarsa and Simorgh software are compared, but it is not clear who made this comparison, the author himself or another source, due to a failure in citing. On page 554 of the textbook entitled "Organizational Structure of Selected International Digital Libraries," it is stated that "by reviewing several of the world's top academic digital library websites and the results of a thesis..." while the names of the websites and the thesis are not mentioned. This section requires accurate citations and the mention of the names of selected (elite) international digital libraries for review by the audience community.

Furthermore, in the last paragraph of page 426, according to the definition of digital librarianship (staff with technical skills related to digital libraries), "digital librarian" is the

appropriate word rather than "digital librarianship." However, in what follows in the same paragraph, digital librarianship is correctly used because it is explained as "digital librarianship can be defined as a set of skills for collection, organization, collection development, etc." However, the English equivalents of the two mentioned terms should have been stated in the footnotes. Also, it is recommended that more recent citations be utilized in new topics such as "digital librarianship" and "digital librarian." Old sources are used for the historical process (trajectory) of a topic.

Some Persian words used, such as "inventors (موجدان)," are ambiguous. Since there is no English equivalent for it, an effective search cannot be done. An investigation into the reference Harvey (2010), from which the mentioned word was taken, was inconclusive. Considering what follows in the same sentence: "... all inventors, users, and data librarians...", it would be better to use the words author or creator, which are common words, instead of inventors (موجدان).

Additionally, a review of available Persian and English textbooks demonstrated that many textbooks have been published on digital libraries and related topics. A comparison between published textbooks and the current textbook indicates that it is almost similar to other existing textbooks in terms of syllabi. This textbook aimed to cover all the topics related to digital libraries. Among the positive points of this textbook is dedicating a separate chapter to digital librarianship, organizational structure, and human resources in digital libraries. Table 5 evaluates the textbook based on content criteria.

Table 5. Evaluation checklist of the textbook under review according to content criteria

N.	Content features	Very much	Much	Moderate (3)	Low (2)	Very low (1)
1	Various items for content explanation		4			
2	Documentation (cited sources)		4			
3	Fresh content				2	
4	Up-to-date content			3		
5	Understandability and readability		4			

6	Appropriateness with scientific, national, and international content and developments			3		
7	Item accordance with audience's needs		4			
8	Item accordance with society's needs			3		
9	Item accordance with market needs		4			
10	Content capacity in connectivity with interdisciplinary subjects		4			
11	Content accordance with students' prior knowledge		4			
12	Item accordance with other items in the syllabi		4			
13	Examples and exercises for a better understanding of the content			3		
14	Item accordance with the time assigned for learning		4			
15	The comprehensiveness of the textbook according to goals and syllabi	5				
16	Having a group of professional reviews					1
17	Publisher's thematic focus		4			
18	Author's credibility	5				
19	Co-authorship					1
	Total score: 66 (70.52%)	10	40	12	2	2

Acceptable work: scored 66.5/95

Conclusions and Recommendations

This paper criticized and evaluated the textbook "Management of Digital Libraries: A Practical Guide" based on criteria of university textbooks, including formal, structural, writing, and content criteria. According to the results of the analysis, it scored 54/70 (72%) in terms of formal criteria, which was acceptable. It also scored 40/70 (53.33%) and 47/70 (67.14%) for

structural and writing criteria, respectively, which were unacceptable. In general, it scored 66/95 (69.47%, almost 70%). In general, the textbook under criticism can be suitable and practical for students as a work that collects all the materials available in digital libraries by dealing with the problems. As the title implies, it was expected that the audience would be provided with practical examples of topics on digital libraries. Therefore, practical examples should be given to better understand and convey the concept to the audience. In addition, since some of the presented topics were discussed in other published textbooks, whether written by the author of the present textbook or by other authors, the present textbook should have been more concise and focused on the practical expression of the topics. Besides, better and innovative cover designs should have been used. Among the factors that can help improve the present work are modifying photo captions, the publisher's innovative cover design, providing footnotes for jargon, required persons and concepts, citations, providing a glossary and index, and a list of tables and figures. Therefore, the author is recommended to provide practical examples and new instances, use up-to-date sources, reduce textbook volume, and avoid providing duplicate content to improve the current work in the next editions. Also, among the positive points of this textbook is a separate chapter dedicated to digital librarianship, organizational structure, and human resources in digital libraries and the author's credibility and expertise.

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