

ALTERNATIVE CLASSIFICATION FOR ELEMENTARY SCHOOL LIBRARIES: A NARRATIVE LITERATURE REVIEW

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Abstract

This study aims to review alternative classification systems that can replace the Dewey Decimal Classification (DDC) in elementary school libraries, especially since the Indonesian National Library Regulation No. 4 of 2024 mandates DDC as the required system. The main issue discussed is the incompatibility of DDC with the cognitive and literacy development levels of young users. Using a narrative literature review method, eight relevant studies were analyzed and grouped into four categories of alternative classification systems: visual (color and symbol-based), interest-based, culturally-based, and locally contextualized systems. Findings indicate that alternative classification systems are more inclusive, intuitive, and aligned with how children perceive and interact with information. Visual systems facilitate independent searching and boost reading interest, while interest- and culture-based systems enhance emotional engagement. Locally contextualized systems allow school libraries to adapt to real-world needs. Based on these findings, the study recommends that the National Library provide greater flexibility and innovation opportunities in classification for school libraries, instead of enforcing a single, universal model. Classification systems should be adaptive and centered on students' needs, enabling school libraries to serve as meaningful, engaging learning spaces.

Keywords: *Alternative classification, elementary school library, DDC, visual classification, library policy.*

INTRODUCTION

National Library Regulation No. 4 of 2024 was created as a mandatory reference in the organization, management, and development of school libraries. The standards in National Library Regulation No. 4 of 2024 are 6, which include (1) library collection standards, (2) library facilities and infrastructure standards, (3) library service standards, (4) library staff standards, (5) implementation standards, and (6) library management standards. In the first point regarding collection standards in school libraries at all levels, especially in Elementary Schools which are the main focus of this research, the policy makers wrote that school libraries should use the Dewey classification. As quoted in point b 3.6 of Organizing Library Materials in the National Standards for School/Madrasah Libraries:

"organizing library materials, consisting of: registration (inventory and tagging/stamping), descriptive cataloging in the form of bibliographic descriptions, and subject cataloging in the form of determining subject headings and class numbers; post-cataloging

(collection completeness), and aligning collections on shelves based on the following standards: (1) guidelines for bibliographic description and determining main entry headings (Indonesian Cataloging Regulations); 2) the Dewey Decimal Classification; 3) subject heading guidelines."

Why was the Dewey classification system or the Dewey Decimal Classification (DDC) chosen, considering that there are various other types of classifications currently available for use by libraries? This is important to examine, especially since the National Library Standards (SNP) for other types of libraries (such as Early Childhood Education Libraries, Special Libraries, and Special Needs Libraries) do not require the use of the Dewey Decimal Classification (DDC). Ubillo Venega (2005) stated that the selection of a classification system should ideally be the responsibility of each library, as each library has different user needs and characteristics. Therefore, the establishment of the DDC as a mandatory system in the National School Library Standards is considered to ignore contextual needs, particularly for elementary school libraries, and limit flexibility in developing services appropriate to students.

The DDC classification was created by an American librarian named Melvil Dewey in 1876. He first applied the Dewey classification at the Amherst College library where he worked. Therefore, the DDC was initially created based on collections in public libraries in America, not in Indonesia, and was not designed for school libraries. The author believes that each type of library has different users, different collections, and different needs and classifications. As Birger Hjørland stated, each type of library has its own specific criteria (Hjørland, 1998). He also added that in different writings, classification is judged to be effective or not based on its purpose, and that different goals will motivate the creation of new classifications (Hjørland, 2008).

Rachel Ivy Clarke stated that classification is a crucial component of organizing knowledge, helping users and librarians find access to the information they seek. Therefore, a clear understanding of classification is crucial for librarians (Clarke, 2021). Linguistically, classification itself, according to the Big Indonesian Dictionary, can be defined as a systematic arrangement into groups, classes, or categories according to established rules. Therefore, with this classification, library collections, or books in general, are arranged by discipline or subject, so that books on the same topic or topic are close together.

The DDC organizes books into classes or disciplines, rather than subjects or topics (Clarke, 2021). There are 10 main classes in the Dewey classification with numbers 000 - 900, these classes quote from the book "A Handbook of History, Theory and Practice of the Dewey Decimal Classification" as follows (Satija & Kyrios, 2023):

Number or Class Code	Class Classification
000	Computer Science, Information, and General Studies
100	Philosophy & Psychology
200	Religion
300	Social Sciences
400	Language
500	Science
600	Technology
700	Arts and Recreation
800	Literature
900	History & Geography

Table 1: Major Classes of the Dewey Classification

The main classes above have undergone several changes or revisions. This is certainly not the case for the first DDC published in the book "A Classification and Subject Index for Cataloguing and Arranging the Books and Pamphlets of a Library" written directly by Melvil Dewey in 1876. As conveyed by Majumder and Sarma, the DDC has undergone revisions to keep in line with science to accommodate certain topics and meet the ever-increasing demand (Majumder & Sarma, 2007). So the DDC has undergone improvements or revisions to adapt to the needs of users, this shows that the DDC is not suitable for many users. The following is an image of the first main classes written by Dewey, published in 1876.

DIVISIONS.	
0	
10	BIBLIOGRAPHY.
20	BOOK RARITIES.
30	GENERAL CYCLOPEDIAS.
40	POLYGRAPHY.
50	GENERAL PERIODICALS.
60	GENERAL SOCIETIES.
70	
80	
90	
100 Philosophy.	
110	METAPHYSICS.
120	
130	ANTHROPOLOGY.
140	SCHOOLS OF PSYCHOLOGY.
150	MENTAL FACULTIES.
160	LOGIC.
170	ETHICS.
180	ANCIENT PHILOSOPHIES.
190	MODERN PHILOSOPHIES.
200 Theology.	
210	NATURAL THEOLOGY.
220	BIBLE.
230	DOCTRINAL THEOLOGY.
240	PRACTICAL AND DEVOTIONAL.
250	HOMILETICAL AND PASTORAL.
260	INSTITUTIONS AND MISSIONS.
270	ECCLIASTICAL HISTORY.
280	CHRISTIAN SECTS.
290	NON-CHRISTIAN RELIGIONS.
300 Sociology.	
310	STATISTICS.
320	POLITICAL SCIENCE.
330	POLITICAL ECONOMY.
340	LAW.
350	ADMINISTRATION.
360	ASSOCIATIONS AND INSTITUTIONS.
370	EDUCATION.
380	COMMERCE AND COMMUNICATION.
390	CUSTOMS AND COSTUMES.
400 Philology.	
410	COMPARATIVE.
420	ENGLISH.
430	GERMAN.
440	FRENCH.
450	ITALIAN.
460	SPANISH.
470	LATIN.
480	GREEK.
490	OTHER LANGUAGES.
500 Natural Science.	
510	MATHEMATICS.
520	ASTRONOMY.
530	PHYSICS.
540	CHEMISTRY.
550	GEOLOGY.
560	PALEONTOLOGY.
570	BIOLOGY.
580	BOTANY.
590	ZOOLOGY.
600 Useful Arts.	
610	MEDICINE.
620	ENGINEERING.
630	AGRICULTURE.
640	DOMESTIC ECONOMY.
650	COMMUNICATION AND COMMERCE.
660	CHEMICAL TECHNOLOGY.
670	MANUFACTURES.
680	MECHANIC TRADES.
690	BUILDING.
700 Fine Arts.	
710	LANDSCAPE GARDENING.
720	ARCHITECTURE.
730	SCULPTURE.
740	DRAWING AND DESIGN.
750	PAINTING.
760	ENGRAVING.
770	PHOTOGRAPHY.
780	MUSIC.
790	AMUSEMENTS.
800 Literature.	
810	TREATISES AND COLLECTIONS.
820	ENGLISH.
830	GERMAN.
840	FRENCH.
850	ITALIAN.
860	SPANISH.
870	LATIN.
880	GREEK.
890	OTHER LANGUAGES.
900 History.	
910	GEOGRAPHY AND DESCRIPTION.
920	BIOGRAPHY.
930	ANCIENT HISTORY.
940	EUROPE.
950	ASIA.
960	AFRICA.
970	NORTH AMERICA.
980	SOUTH AMERICA.
990	OCEANICA AND POLAR REGIONS.

Figure 1: First DDC Main Class (Melvil, 1876).

Therefore, the DDC main classes above must be implemented by elementary school libraries to ensure they meet national standards according to the National Library. For example, in DDC 100, there are books on Philosophy and Psychology. Are elementary school library users, namely the students themselves, interested in or reading books about Philosophy? Classification should be based on how children understand the world and how they learn in school, not simply on adult logic (Cooper, 1997).

Previous research has suggested that DDC is inappropriate for elementary school libraries because it is too complex and does not align with children's information seeking methods (Neset, 2013). The DDC classification system was first implemented by Melvil Dewey at Amherst College in 1876, where he worked as a librarian. Several years later, the elementary school library at The Common School in the same city tried using DDC. However, the school quickly realized that the system did not meet the needs and characteristics of its young students (Cooper, 1997).

In line with this opinion, Dethan and Mayesti (2022) stated that the use of Dewey Classification (DDC) in various libraries is being abandoned because it is considered less appropriate than the Library of Congress Classification (LCC) system. They noted that in the United States, the use of the Dewey Classification has declined by about 1% annually since 1960. At the time of their study, only about 20% of libraries in the United States still used the DDC system. Some school libraries have also abandoned DDC, finding ways to accommodate the innate preferences of children or elementary school students by using visual cues or color (Nesset, 2013). In other library types, public libraries in the United States have begun abandoning traditional classifications like DDC in favor of BISAC, or Book Industry Standards and Communications (Clarke, 2021).

Recent studies have shown a downward trend in the use of DDC in elementary school libraries, citing the system's perceived inadequacy to children's cognitive and literacy needs (Cooper, 1997; Nesset, 2013). However, contradicting these findings, National Library Regulation No. 4 of 2024 mandates the DDC as the national standard for elementary school libraries. Therefore, this study aims to answer the following research questions: What alternative classification systems can replace the DDC for elementary school libraries based on the literature? and Why were these alternative classification systems developed, especially in the context of the needs of elementary school libraries?

Although global trends indicate a decline in the use of DDC in various types of libraries, particularly elementary school libraries that prioritize child-centered and visual user approaches, National Library Regulation No. 4 of 2024 still mandates the use of DDC for school libraries. This raises policy questions, especially since similar regulations for early childhood education (PAUD), special needs (SLB), and special libraries do not mandate the use of DDC. This gap between international practices, the needs of child users, and national regulations is a research gap in this study. To date, there are few studies that critique the mandatory use of DDC in the context of the National Standards for School Libraries (SNP) or that explore alternative, more appropriate classification systems.

The author hopes this research can contribute to enriching the study of alternative classification systems that are more relevant and user-friendly for elementary school libraries, particularly in the Indonesian context. The study's findings can serve as a consideration for school librarians in re-evaluating the implementation of the DDC system, currently mandated by national standards, and in creating opportunities for innovation in collection organization. This research presents a literature-based and practice-based critique of the provisions of National Library Regulation No. 4 of 2024, while also proposing a classification approach that is more adaptive, inclusive, and oriented toward the needs of children as the primary users of elementary school libraries.

RESEARCH METHOD

This study employed a qualitative approach with a literature review method and a narrative literature review. A narrative literature review provides an overview of current knowledge on a specific topic. A narrative literature review does not require an explanation of the methodology used by the author in compiling the literature or the literature cited in the review, as its findings depend largely on the literature the author selects for inclusion (Skelly et al., 2019). Narrative literature reviews, also known as traditional literature reviews, are commonly used in the social sciences and humanities. This approach is suitable for answering

exploratory research questions based on qualitative data (Ebidor & Ikhide, 2024). This review can be written relatively quickly compared to a systematic literature review and is typically written by experts in the field to present insightful opinions and ideas (Skelly et al., 2019).

To maintain the quality of the study, the authors established inclusion and exclusion criteria and conducted a literature search across several academic databases. The selection yielded eight literatures deemed representative because they encompass a variety of contexts and alternative classification approaches in elementary school libraries. Reliability is maintained through cross-reference comparisons of findings, while validity is strengthened by selecting reputable academic publications. Therefore, the narrative literature review method used in this study not only presents a summary of the literature but also produces a critical synthesis that can answer the research question regarding alternative classification systems for elementary school libraries.

Therefore, this study uses a narrative literature review. The author can conclude that a narrative review is used because it can review various literature sources written by the author according to their own judgment and can reveal ideas related to classification in school libraries. This study will review various literature that can answer the research question regarding alternative classification systems that can replace the DDC in school libraries and why or the reasons behind the creation of these alternative classification systems.

RESULT AND DISCUSSION

The literature search for this study was conducted through several sources, including the scientific database Scopus, the journal publisher portal Taylor & Francis, and general search engines Google and Google Scholar. Keywords used included "alternative classification for school libraries" and "classification in school libraries." In determining the literature to be reviewed, the researcher established inclusion and exclusion criteria to ensure the relevance and accuracy of the study. Inclusion criteria included:

1. Literature discussing alternative classification systems other than the DDC.
2. Focus on the context of school libraries, particularly elementary schools.
3. Accessible through online databases or scientific platforms.

The researcher did not limit the literature based on language or year of publication, as long as the content was relevant to the study topic. Meanwhile, exclusion criteria included:

1. Literature that only discusses traditional classification systems without offering alternatives.
2. Articles unrelated to the context of school libraries or child users.
3. Non-academic publications such as personal blogs, popular news, or sources without peer review.

Using these criteria, the reviewed literature was selected rationally and aimed to build a deep and contextual understanding of alternative classifications within the elementary school library environment. From the search results, the author selected eight relevant literatures based on their suitability to the research topic. These eight literatures are detailed in Table 1, arranged in order of publication year, from earliest to most recent:

No.	Author (Years)	Title	Code
1	(Cooper, 1996)	<i>Problems Associated with the Ability of Elementary School Children to Successfully Retrieve Material in the School Library Media Center and Some Alternative Methods of Classification Which May Help to Alleviate These Problems: A Case Study of The Common School Library, Amherst, Massachusetts</i>	L1
2	(Cooper, 1997)	<i>The Retrieval of Information in an Elementary School Library Media Center: An Alternative Method of Classification in The Common School Library, Amherst, Massachusetts</i>	L2
3	(Houston, 2008)	<i>The Use of Reading Levels as Alternative Classification in School Libraries</i>	L3
4	(Pinheiro, 2009)	<i>Classificação em Cores: Uma Metodologia Inovadora na Organização das Bibliotecas Escolares do Município de Rondonópolis-MT</i>	L4
5	(Lacruz et al., 2013)	<i>INDIZAR, CLASIFICAR Y ORGANIZAR LAS COLECCIONES DE LAS BIBLIOTECAS ESCOLARES: herramientas en lengua española y portuguesa</i>	L5
6	(Schoppert, 2014)	<i>A Review of the Literature on Elazar's Classification System for Libraries of Judaica</i>	L6
7	(Clarke, 2021)	<i>Library Classification Systems in the U.S.: Basic Ideas and Examples. Cataloging & Classification Quarterly</i>	L7
8	(Izuchukwu et al., 2021)	<i>Organization of school library resources using in-house classification schemes</i>	L8

Table 2: List of Article Search Results

Next, each of the eight literatures discussed will use the codes found in the rightmost section of the table. Before that, the author will briefly review alternative classifications and school libraries.

Alternative Classifications and School Libraries

There are many examples of alternative classifications, or classifications other than the DDC, such as the Library of Congress Classification (LCC), Universal Decimal Classification (UDC), Bliss Bibliographic Classification (BCC), and the Colon Classification (CC), created by the "Father of Library Science" in India, S.R. Ranganathan. One study called the CC classification the best classification (Harati & Kaffashan-Kakhki, 2019). Another example of a classification system found in the children's collection of a Korean public library uses the Korean Decimal Classification, the Bluebird Classification, and the Zelkova Classification. A study suggested simplifying the classification for easier understanding and access by children (Chung & Mi-Hwa, 2021). Traditional classification systems like the DDC are difficult for young users or elementary school students to understand, and using alternative classification systems can help them find information or books in the library (Houston, 2008).

National Library Regulation No. 4 of 2024 stipulates the National Library Standards for all levels, from elementary to high school, regulated in the same regulation. This regulation mandates the use of DDC in the management of library materials in elementary school libraries, even though the introduction explained above clearly shows that DDC is starting to be abandoned by libraries in the United States, where it was created. The author also provides examples of data on DDC use in libraries from the United States, quoted from Lund et al. (2019).

Schema	United States	Nigeria
DDC	13.5%	2%
LCC	81.1%	93%
Other	5.4%	3%
unknown	<0.2%	2%

Figure 2: Representation of DDC in the United States

Color and Symbol-Based Classification

L1 offers an alternative classification system using colors and symbols to make it easier for children to find materials in the library of The Common School elementary school in Amherst, Massachusetts, United States. The Common School elementary school had previously used the Color and Symbol Classification System (DDC), but quickly realized that it was not appropriate for their elementary school library because it was deemed inappropriate for the school's needs and population. The rationale behind this alternative classification system was that children struggled to use DDC due to limitations in cognitive development, reading ability, and alphabet comprehension. The traditional system was too abstract and did not align with the way children categorize information.

L1's goal was to examine the challenges children face in accessing library materials and evaluate the effectiveness of an alternative color and symbol-based classification system. The method used was a case study at The Common School Library, with data collected through observation, interviews, and document analysis. The results of L1's research indicate that children are able to use a classification system designed for their developmental level, and that color and symbols facilitate independent material search. L2 recommends an alternative system, a color- and symbol-based system. This is similar to the previous L1 study, as it is a more detailed continuation of that study by the same authors. An example of an alternative classification using color is black for fiction, yellow for biographies, orange for countries and cultures, red for languages, purple for art, green for science, and white with additional coding for picture books. The rationale for creating the alternative classification is that the DDC is too complex for children, who are more responsive to visuals such as color and symbols. The purpose of L2 is to explain the implementation of an alternative classification system at The Common School and evaluate its impact on children's independence in finding books. The method used in the L2 study was a qualitative case study, using observations and interviews. The results of the L2 study showed that children could easily understand and use the system, and this system encouraged reading interest and independence.

L3 proposes an alternative classification system, a classification based on reading level, similar to the Accelerated Reader or Reading Counts programs, with books color-labeled according to their reading difficulty. This classification based on reading level helps children find books that match their reading ability and facilitates teachers and librarians in guiding book selection. L3 aimed to determine the characteristics of school libraries that use reading level classification and understand the rationale behind their implementation. L3 used a survey of school librarians in Kentucky, using statistical analysis and open-ended responses. The results of L3's research revealed that this reading level classification system is popular in rural elementary schools with limited resources, increasing accessibility but potentially limiting children's exploration.

L4 proposed color classification for textbooks, such as red for Portuguese, green for science, and for literary genres, such as blue for fantasy. L4 recommended color classification as an alternative to DDC because it makes it easier for elementary school children in Rondonópolis, Brazil, to find books without assistance and to make the library more visually appealing. The purpose of this study was to implement and evaluate a color classification system in school libraries. The method used was a collaborative project between a university and the local government, with implementation and observation. The results showed that the color system increased children's interest in reading and independence, and librarians and teachers responded positively.

A review of literature from L1 to L4 indicates that a color- and symbol-based classification system is an effective alternative approach for elementary school libraries. This literature highlights the limitations of elementary school children in understanding the abstract and numerical structure of the DDC, primarily due to their immature cognitive development, varying reading abilities, and preference for visual elements. Therefore, a color- and symbol-based classification system was developed as a solution to increase children's independence in finding reading materials.

Case studies at The Common School (L1 and L2) demonstrated that children more easily accessed the library's collection with the aid of a consistent color system and visual icons. Similarly, research in Kentucky (L3) demonstrated that classification based on reading levels, symbolized by color, significantly assisted children in rural schools in selecting books appropriate to their abilities. In Brazil (L4), the implementation of color classification in a collaborative project also demonstrated positive results in terms of increasing reading interest and independence for young users. Overall, the color- and symbol-based classification approach offers a more child-friendly, intuitive, and contextual model than DDC and could be a relevant classification solution for elementary school libraries.

User Interest-Based Classification

L5 recommends alternative classification systems that can be implemented by school libraries. These include classification based on reading interest, a condensed version of the UDC, subject headings for children, and the use of an educational thesaurus. L5 proposes alternative classifications because many school library collections are disorganized, making information retrieval difficult. It also emphasizes the need for classification tools that are appropriate to the characteristics of child users, tailored to the educational contexts of Spain, Brazil, and Portugal. The purpose of L5 is to analyze the indexing and classification processes in school libraries and describe the classification tools used in these three countries. The research methods used are a literature review and a critical analysis of existing classification tools. The results of the L5 study indicate that the condensed version of the UDC and reader interest-based classification are the most widely used. Spain has a specific tool for children's books, while Brazil and Portugal have adapted general tools. This study recommends the development of a common classification tool for school libraries.

L7 offers DDC, LCC, and a relatively new alternative classification system compared to the previous two: Reader-Interest Classification (RIC), such as BISAC. The purpose of RIC is to create a more intuitive collection for libraries than DDC/LCC. The goal of L5 is to introduce classification concepts and systems commonly used in the US, using theoretical overviews and practical examples. This research demonstrates that Reader-Interest Classification (RIC), such as BISAC, is gaining popularity in public libraries. The limitations of RIC make it less suitable for

large collections. DDC and LCC are considered unintuitive for novice users, especially elementary school children, due to their rigid academic disciplinary structures. Users are more comfortable searching based on their interests, rather than having to understand the discipline.

The L5 and L7 literature shows that the user-interest-based classification approach emerged as a solution to the limitations of traditional classification systems like DDC and LCC, especially in school library environments. Interest-based classification aims to organize collections based on topics familiar and easily understood by children, such as animals, adventure, or literacy, rather than rigid academic categories. A study comparing classification practices in Spain, Brazil, and Portugal (L5) found that classification tools such as the condensed version of the UDC and children's heading lists were more widely used, and interest-based classification systems were considered most appropriate to the context of child users and local education systems.

Meanwhile, L7 literature introduced Reader-Interest Classification (RIC), such as BISAC, as a popular approach in public libraries that is being phased out by DDC. The RIC system is considered more intuitive because it groups books based on user interests, not academic discipline. While it has limitations for large collections, interest-based classification has proven more user-friendly for children and lay users. Overall, this literature underscores that classification systems that address users' mindsets and interests provide ease of access, enhance literacy experiences, and support children's independence in exploring library collections.

Culturally Needs-Based Classification

L6 informs about the existence of an alternative classification system besides the DDC that adapts to the cultural needs of Judaica collections, specifically Jewish collections. This classification is called the Elazar Classification System (ECS). The ECS was created because the DDC and LCC were inadequate for Jewish collections. For example, the term "Old Testament" for the classification of Jewish scriptures was considered biased, and libraries with Jewish collections, including school libraries, needed a system that reflected Jewish perspectives and terminology. L6 aimed to explore the development, acceptance, and advantages of the ECS using a literature review. The study found that the ECS is used primarily in synagogues (Jewish houses of worship) and Jewish schools, and that the system successfully meets specific user needs but is less well-received in academic libraries.

The L6 literature illustrates that specific cultural needs can give rise to alternative classification systems that are more representative of the user community. The Elazar Classification System (ECS) was developed in response to the limitations of universal classification systems like the DDC and LCC in accommodating Judaica collections. The terminology and structure used in the DDC were deemed theologically insensitive and did not reflect the structure of knowledge within the Jewish tradition. The ECS was designed to reflect the perspectives of the Jewish community, encompassing its historical sequence, terminology, and religious and social context. The ECS was implemented in synagogue and Jewish school libraries and was deemed successful in meeting specific user needs, although it has not been widely adopted in academic settings. These findings demonstrate that classification need not be universal but can be developed contextually based on the values, language, and mindsets of a particular community. In the context of school libraries, the ECS demonstrates that a classification system that addresses the identity and characteristics of users has strong functional and cultural value.

Classification with Local Context

L8 identified an alternative classification scheme to the DDC: an in-house classification developed specifically for school libraries in Nsukka. This was due to the DDC's perceived inaccuracy in the local Nigerian context, such as its inaccurate geographical representation, and to address the lack of classification schemes used in Nigerian school libraries. The purpose or focus of this study was to develop a specific classification scheme for primary and secondary school libraries in Nsukka. The research methods used were a descriptive survey with questionnaires, interviews, observation, and document analysis. The findings of the L8 study revealed that there was no classification scheme in use in Nsukka school libraries, and that library collections were poorly organized. The study, conducted in Nsukka, Nigeria, emphasized the urgent need for a contextual and locally relevant classification scheme for school libraries. The inadequacy of the DDC to local needs, such as inaccurate geographic representation and students' alienation from its classification structure, prompted the initiative to create a more grounded and functional in-house classification. The lack of a classification scheme actively used in many school libraries indicates a gap in practice that is detrimental to the process of organizing and finding information. The recommendations, namely librarian training, resource provision, and the implementation of a local scheme, reinforce the argument that standardized classification does not always guarantee functionality if it is not adapted to the sociocultural context of users.

These findings reinforce the critique of the forced use of DDC in school libraries, as stipulated in National Library Regulation No. 4 of 2024. If Nigeria also sees a pressing need for local classification, then school libraries in Indonesia also need to be given the space to develop alternative classification schemes that better suit student needs, local languages, and the structure of the national curriculum. Context-based classification, or local systems, perhaps developed in schools, could be a more inclusive, practical solution than simply adopting a universal system that is distant from the realities of the field.

Although DDC has long been the dominant standard for organizing library collections, it has proven incompatible with the needs of children using primary school libraries (Cooper, 1997; Martínez-Ávila et al., 2014; Schoppert, 2014). This research confirms that DDC presents serious barriers from cognitive, pedagogical, and psychosocial perspectives (Houston, 2008). According to Nasset (2013), young users or elementary school students often struggle to navigate DDC because they have to understand the hierarchical numerical structure and academic concepts that are not yet appropriate for their developmental stage. Cooper (1997) even showed that elementary school students rely more on visual elements such as color, size, and illustrations to recognize and select books, rather than numerical classification categories.

An alternative classification system developed based on color and symbols in L1, L2, L3, and L4 has shown more promising results. Research at The Common School demonstrated that children were able to find and return books more independently when the classification system used consistent colors and simple icons (Cooper, 1997). This finding is supported by Hoffman (1999), who designed a color-based system to accommodate children's ability to understand the contents and location of collections. A study in Brazil (Pineiro, 2009) showed that the use of color classification not only improved information access but also had a direct impact on increasing children's interest in reading and ownership of reading spaces.

In addition to visuals, a user-interest-based classification approach in L5 and L7 has also proven effective. Clarke (2021) highlights that classification systems like BISAC, which group books based on popular and easily recognized themes, are becoming increasingly common in US

public libraries, precisely because they are perceived as more intuitive and enjoyable. Meanwhile, Lacruz et al. (2013) show that in some countries, such as Spain and Portugal, librarians have adapted classification tools based on children's subject headings and educational thesauri to replace or simplify the DDC, with results that support children's learning and literacy experiences more meaningfully.

Culturally informed classification systems, such as the Elazar Classification System, also offer important lessons. The ESC, developed for Judaica collections, offers an alternative to the DDC, which is epistemic, theologically neutral, and insensitive to the epistemic structures of the Jewish community (Schoppert, 2014). The ESC builds on the internal principles of Jewish culture, history, and educational values, making it more meaningfully inclusive for its user community. This demonstrates that classification is not merely a technical matter, but also concerns identity representation and epistemic justice. In a more pragmatic context, a study in Nsukka, Nigeria demonstrated the urgency of in-house classification for under-resourced school libraries isolated from policy centers (Izuchukwu et al., 2021). The absence of a relevant classification system in the region resulted in disorganized collections, limited access, and low student information literacy. The study concluded that classification systems need to be developed locally, taking into account the socio-cultural context, educational level, and available institutional support.

When all these literature findings are linked to national policy in Indonesia, specifically National Library Regulation No. 4 of 2024, which mandates the use of DDC for all libraries in elementary schools and at all levels of schooling, a clear gap emerges between policy and reality. This obligation appears top-down and homogenous, yet in practice, universal classifications like DDC often fail to reflect the real needs of elementary school students. Even the National Library Standards for Early Childhood Education (PAUD), Special Needs Schools (SLB), and special libraries do not mandate the use of DDC, raising fundamental questions about why only elementary schools are forced to adhere to a system that has been widely criticized and abandoned.

This discussion confirms that alternative classification systems, whether based on visuals, interests, culture, or local context, are not only worthy of consideration but are actually more relevant, inclusive, and functional for elementary school libraries. Libraries, as spaces for children to learn and grow, should adapt to their way of thinking, rather than imposing unfamiliar adult standards (especially the American DDC) that hinder children's interaction with books. National policies need to open up space for classification innovation to be more adaptive to the diversity of school contexts and to prioritize child users as the main subjects of school library services.

CONCLUSION

The results of this literature review confirm that the Dewey Classification System (DDC), currently mandated by the National School Library Standards in National Library Regulation No. 4 of 2024, does not fully reflect the characteristics of the primary users of elementary school libraries: children. The complexity of numbers, the academic or disciplinary structure, and the overly abstract classification approach make the DDC difficult for children to understand, especially those in the early stages of literacy development and still learning to read.

Conversely, various literature indicates that alternative classifications, such as color- and symbol-based systems, classifications based on user interests, cultural needs, and local

context, are more effective and child-friendly. Visual-based systems have been shown to increase children's independence and interest in reading (Cooper, 1997; Pinheiro, 2009), while interest- and culture-based approaches provide stronger contextual relevance and emotional engagement (Clarke, 2021; Schoppert, 2014). In Nigeria, the implementation of in-house classification has also been shown to be highly effective in addressing local needs not covered by the DDC (Izuchukwu et al., 2021).

It is noteworthy that National Library Regulation No. 4 of 2024 continues to mandate the use of the DDC as the sole classification system for all school levels, including elementary schools. This policy inconsistency contrasts with other regulations, such as the National Library Standards for Early Childhood Education (PAUD), Special Libraries, and Special Schools (Sekolah Khusus Khusus/Special Schools), which do not impose similar obligations on specific classification systems. This difference in approach raises questions about the rationale for the classification policies applied differently across library types, as well as the extent to which flexibility and user contextuality are taken into account in these national standards.

Based on the findings of this study, it is recommended that the National Library consider allowing for innovation in the selection of classification systems in school libraries. This recommendation is based on the policy inconsistency evident in National Library Regulation No. 4 of 2024, which mandates only school libraries to use the DDC, while other types of libraries, such as PAUD, SLB, and special libraries, are not burdened with similar obligations. Furthermore, various literature indicates that alternative classification systems, such as those based on color, symbols, interests, or local context, are more effective in elementary school libraries because they are more child-friendly, encourage independence, and align with children's thinking patterns. Therefore, providing librarians with the flexibility to choose a system that best suits the needs, abilities, and context of their students will enable school libraries to become inclusive, enjoyable, and meaningful learning spaces for Indonesian children.

The National Library is also advised to develop a classification system tailored to the subject needs of schools. This can be done by collaborating with the Ministry of Primary and Secondary Education, the Ministry of Religious Affairs, the Indonesian Book Information System, state-owned book publishers such as PT Balai Pustaka, professional organizations such as the Indonesian Librarians Association, the Indonesian School Library Personnel Association, librarianship education centers such as the Department of Library and Information Science at the University of Indonesia or the Association of Library and Information Science Higher Education Providers, or with the authors of this study, who are developing a classification system specifically designed for school libraries in Indonesia called the Bobby Color Classification.

SUGGESTION

Based on the findings of this study, the development of a digital content management strategy for school libraries needs to be directed towards a more systematic and adaptive approach to the dynamics of the elementary school audience. Moving forward, utilizing Meta Ads can be a strategic step to expand the reach of content in a targeted manner, especially to more specific targets such as final-year students, school alumni, and prospective new students. Furthermore, consistency in content production and publication must be maintained through planning an editorial calendar aligned with the academic calendar and relevant local issues, so that educational messages can be delivered sustainably and impactfully.

Enhancing the digital literacy capacity of librarians and library management staff is also a critical priority. Training on social media account management, metadata-based content design, and the ability to read and analyze statistical data from digital platforms like Google Analytics and Meta Business Suite is an urgent need. Collaboration with communities, schools, community leaders, and strategic institutions also needs to be strengthened to expand organic content dissemination through various programs such as QR code sharing, online mini-talk shows, and public campaigns.

Furthermore, further research is needed to develop AI-based recommendation systems, informative chatbots, and the integration of automatic tagging systems to create a more personalized, interactive, and efficient library service experience. This way, school libraries can move toward a more participatory and innovative digital service ecosystem to support the literacy of Indonesian children.

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Hopefully, this small contribution can benefit the development of school library practices and encourage continued innovation in information services for the younger generation..

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