

The Availability of Access Features in Children's Non-Fiction

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ABSTRACT

This study analyzes the availability of access features in children's non-fiction as compared to their prevalence in adult non-fiction because such features are an important part of the research process increasingly demanded of younger and younger students in schools. Access features studied include: table of contents, index, bibliography, endnotes/footnotes, glossary, and suggestions for further reading list. This study found that children's non-fiction books were less likely to include bibliographies or endnotes, but more likely to include glossaries or suggested reading lists. Tables of contents and indexes were the two most popular access features in each section. Results are divided by Dewey Decimal Classification classes.

1. Introduction

Non-fiction or informational books for children are often ignored by librarians when recommending books to readers or preparing materials for presentation and programming. However, this part of the library collection is still very important not only as an information resource for research, for school work and personal enrichment, but also as a source of reading pleasure. Recently developed education standards have directed more focus than ever on STEM (Science, Technology, Engineering, and Mathematics) subjects at all levels of education. This increased emphasis extends to the library, and both public and school librarians need to be prepared to offer strong non-fiction books to support students' learning. Current educational trends also stress the importance of information literacy, starting as early as possible, since so much of our current reality involves sifting through and synthesizing vast amounts of information. To this end, teachers, parents, and students are looking towards non-fiction children's books more than ever to teach students the skills they will need to properly find accurate, relevant information on any given topic.

Because of this increased focus on non-fiction children's books, it is imperative that libraries provide quality non-fiction books at all reading levels that are equipped to encourage proper research technique. Standards for children's non-fiction should be just as important as standards in informational books written for adults. Arguably, accuracy, formatting, and appropriate documentation features

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are more important in books intended for a child because they lack the information literacy skills or prior knowledge on many topics to effectively evaluate a resource on its own. Features like a glossary to explain new words are important for all readers, but especially children who are more likely to have a limited vocabulary. These academic access features are the purpose of this study.

2. Related Studies

The importance of non-fiction books for children has been the focus of many recent studies in both the fields of education and library science. Russell (2004) argued that non-fiction reader development is just as important as developing competent readers of fiction, although schools and reading programs seem to focus solely on the latter. Dreher (2003) wrote that information books were certainly as important as fiction since we are living, after all, in the information age, and that children encouraged to seek out non-fiction for pleasure were more skillful readers and more motivated to read on their own. Carlson (2005) also discussed differences in reading fiction and non-fiction, stating that the latter was important in actively encouraging students of any age to become independent researchers. Many studies have been done about the use of non-fiction books as recreational reading, particularly as a lure to motivate reluctant readers, among them Doiron (2003), who wrote that many children prefer reading informational books, and fostering that enjoyment is an excellent way to encourage life-long reading habits.

Many researchers have studied non-fiction books' increasing popularity with educators for even very young readers. Duke (2003) supported this argument, reasoning that information books encouraged knowledge acquisition as well as reading skills and vocabulary building, and were therefore perfectly appropriate for use in classrooms of students just learning to read. Another proponent of informational texts for emergent readers, Richgels (2002) wrote that schools are seeing an increasing emphasis on literary content learning at younger and younger ages, and found that information books are not beyond the abilities of kindergarten-aged students. Richgels also argued the importance of making students understand the function these books serve, not just in academic research, but in daily life, and how these books can be used outside of an assignment. Yopp & Yopp (2012) found that young children's exposure to this genre is still fairly limited, despite trends in curriculum to include more informational books in classrooms. Children were most familiar with non-fiction books about life sciences, and both authors advocated an increase in and broadening of students' exposure.

Educational trends seem to be the driving force behind much of this academic study. Weisman (2012) wrote about how the Common Core State Standards, increasingly adopted by boards of education throughout the United States, encourage the use of non-fiction books besides textbooks in the classroom so that students can become researchers at a young age, learning the information literacy skills necessary to search for and evaluate information and use it to write arguments. Ediger (2010) described this phenomenon as well, implying that the textbook would be used by teachers for general, introductory information on a topic, and that students would then complete extended, independent research with a library's collection of non-fiction books on a more specific, related

topic of their choice.

This method of using non-fiction books as a way to encourage independent research on the part of students is most evident in the sciences. Pappas (2006) wrote about the importance of this subject in particular as part of integrated literacy, or teaching and practicing literacy skills not in separate reading classes, but along with other parts of the curriculum, showcasing reading as the tool it is. Donovan & Smolkin (2011) described how the increased focus on information books has led to an increase in students' information writing, with examples for how science teachers, perhaps not used to assigning essays, could integrate these skills into their lesson plans. Hopwood (2012) advocated an increased emphasis on STEM subjects in libraries, both in collection development and in program planning, with a list of examples for librarians, to better support school systems' efforts to increase achievement in this area.

Access to quality non-fiction books on a variety of topics is obviously important in the current educational environment, and many studies have attempted to define important features of the non-fiction genre to aid librarians and educators in making informed collection development decisions. In a study on implied readership in children's non-fiction, Larkin-Lieffers (2010) described the need for these books to not only provide accurate information but also to encourage young readers in their research pursuits to develop the skills necessary to thrive in this information age. Inan (2010) described the purpose of non-fiction books for children as giving information about the world, and found in a study that even the youngest readers could understand "information book language".

Since the main purpose of non-fiction books is to provide factual information, accuracy is always stated as their most important feature. Nevelt (2003) wrote that to ensure such accuracy the author must have a thorough knowledge of the subject matter, although Broadway & Howland (1991) found that only 12% of children's science book writers had a main occupation related to science. Most of these books are authored by professional writers of some kind, and Galat (2011) revealed that some see themselves in the role of "translator", interpreting professional scientists in a way children can understand. One of the authors Galat interviewed mentioned using academic articles for research, but added that they were often too difficult to understand.

Though children's non-fiction will necessarily be written at a much simpler level than its adult or academic counterparts, many studies advocate for it being held to the same rigorous standards of form to encourage appropriate research habits as early as possible. Nevelt (2003) wrote that children's informational books should both satisfy and encourage a child's curiosity, and to this end should provide elements to assist in research such as tables of contents, indexes, glossaries, and bibliographies, as well as appropriate documentation such as author's notes, endnotes, bibliographies, recommended further reading and web sites, arguing that this supplementary information is of even more use to child readers because of their limited knowledge about most academic topics.

These features are often referred to as "access features" because their purpose is to allow the reader to more easily access parts of the text as well as other research on the same topic. They are just as necessary in children's books as in those written for adults, because, as has been discussed, children are just as likely to be doing in-depth research on a topic. Inan (2010) writes that even

concept books, informational books for very young children about such basic ideas as shapes or colors, can benefit from an index, as much for parents and educators as children. In their authoritative guide for teachers and librarians on the subject of non-fiction selection, Bamford & Kristo (2003) dedicated an entire chapter to the importance of these access features.

3. Research Design and Methodology

Though many past studies have effectively argued the importance of providing students with quality non-fiction, relatively few have actually measured the current state of library children's non-fiction offerings in a comprehensive way. Much of the push towards broader use of these resources is for the express purpose of turning students into mindful, skilled researchers as early as possible. Therefore, access features are a key requirement to modern informational books used for this purpose. The accuracy of the content will hardly matter if students cannot access it in a useful and meaningful way, and educators cannot expect students to develop these skills without modeling appropriate examples of the accepted academic format. This study aimed to determine the current state of non-fiction book access features found in the library to discover if they are usable by modern students for work in information literacy training. For the purposes of this study, a "children's non-fiction book" and an "adult non-fiction book" were defined as books shelved in the juvenile and adult non-fiction sections of the public library.

To achieve a broad view of the state of the non-fiction collection across many topics, this study utilized the library's own organization scheme, the Dewey Decimal Classification System (DDC). For a comparison across subjects, ten titles were selected from each class (000-900), one from each of the 100 divisions. Following the example of other studies on non-fiction children's books (Inan, 2010; Ladd, 2011; Larkin-Lieffers, 2010), books for inclusion in the study were selected at random from a local public library's shelves, by selecting the fifth book within a given Dewey Decimal Classification division (OCLC, 2012), where possible. If too few books were available in the required number range, the closest approximation was substituted. The public library surveyed owned no books in some classification divisions (see <Table 1>) and these were omitted from the study. For an illustrative point of comparison, the same method was also used to collect non-fiction books from the adult section.

Table 1. DDC Divisions unavailable in the library children's department

Dewey Decimal Classification Division	Subject
040	Biographies*
090	Manuscripts and Rare Books
110	Metaphysics
120	Epistemology
140	Philosophical Schools of Thought
160	Logic
190	Modern Western Philosophy

Dewey Decimal Classification Division	Subject
310	General Statistics
470	Latin and Italic Languages
840	French, Occitan, and Catalan Literature
850	Italian and Romanian Literature
870	Latin and Italic Literature

* Biographies are available in the children's section but are shelved separately, by subject last name. This study chose to treat them as part of the 900 class to which they are most often attached.

For each book, from both the children's and adult sections, the title, author, DDC call number, and number of pages were recorded along with the presence or absence of the following access features: table of contents, index, glossary, sources/works consulted/bibliography, footnotes/endnotes, and suggestions for further research (includes printed works and websites). For the children's books, the number of entries within indexes and glossaries were also tabulated. For the purposes of this study, an index was defined as a listing of topics accompanied by page numbers to be used by the reader to efficiently access information from the text. A glossary was defined as a listing of vocabulary words found within the text along with their meanings. A glossary might also include page numbers to access the information within the text, although this was not its primary purpose. Any listed bibliography could also be taken by the reader as a Suggestions for Further Reading list, particularly in the adult section where there is usually no question of the reader's literacy abilities. This study treated only those access features marked specifically with "Further Reading" or "More Information..." or some other similar signifier as Suggestions for Further Reading, and the rest as bibliographies, even in the case of annotated bibliographies, which some works provided.

After the data collection, the percent inclusion of all the above access features were calculated for each DDC class in both the children's and adult sections. Figures were also obtained on the thoroughness of children's non-fiction book indexes and glossaries by averaging their number of entries over page numbers, since shorter books will undoubtedly lead to sparser subject matter and vocabulary words in the access features.

4. Results

4.1. Table of Contents

This study found that tables of contents were the most common access feature in both children's and adult non-fiction, although adult non-fiction included one more often, at 95.92% to the 79.78% of books for children. For adult books, tables of contents were found in almost all titles surveyed, except some instances in the 200s (religion) and 900s (history and geography). The only class of children's books in which all titles surveyed featured a table of contents was the 100s (philosophy and psychology).

Table 2. Percent of Non-Fiction Books Featuring a Table of Contents

DDC Class	Children's Books Featuring Tables of Contents	Adult Books Featuring Tables of Contents
000s	87.50%	100.00%
100s	100.00%	100.00%
200s	70.00%	90.00%
300s	88.89%	100.00%
400s	44.44%	100.00%
500s	90.00%	100.00%
600s	80.00%	100.00%
700s	80.00%	100.00%
800s	71.43%	100.00%
900s	90.91%	72.73%
Total	79.78%	95.92%

4.2. Index

Indexes were the second most common access feature for both children's and adult non-fiction books, and they occurred almost equally often, 73.86% and 77.55% respectively. Once again, the 100 class (philosophy and psychology) was the only category of children's non-fiction book for which all those surveyed included an index as an access feature. In the adult section, the 300 (social science) and 500 (science) classes all featured indexes.

Table 3. Percent of Non-Fiction Books Featuring an Index

DDC Class	Children's Books Featuring Indexes	Adult Books Featuring Indexes
000s	87.50%	66.67%
100s	100.00%	80.00%
200s	60.00%	70.00%
300s	77.78%	100.00%
400s	62.50%	66.67%
500s	90.00%	100.00%
600s	80.00%	90.00%
700s	60.00%	80.00%
800s	28.57%	50.00%
900s	90.91%	72.73%
Total	73.86%	77.55%

This study examined, not just the presence or absence of certain access features, but also the thoroughness of them. An index that lists very few subjects is less helpful than a more extensive portal into the text. Those non-fiction books in the children's section which included indexes had an average of 168 entries, while those adult books that included them had an average of 676. However, the average children's book length was 81 pages to the adult sections' 290, so a figure

representing the ratio of index entries to total page numbers would be a more accurate comparison. Even when accounting for length, the adult non-fiction indexes were still more thorough, with 2.36 index entries per book page to the children's titles' 1.72.

4.3. Glossaries

Glossaries were the third most common access feature in children's non-fiction books with 53.41% of those surveyed including them, but they were the least common access feature in adult non-fiction, included in only 10.20% of titles. Glossaries were not included in all the titles in any DDC class and in some cases none of the titles used this access feature, including the 800 class (literature) in the children's section and the 100 (philosophy and psychology), 300 (social science), 500 (science), and 800 classes in the adult section. The 500 class featured the most glossaries (90%) in the children's section, despite the corresponding adult books having none. For further details see table below:

Table 4. Percent of Non-Fiction Books Featuring a Glossary

DDC Class	Children's Books Featuring Glossaries	Adult Books Featuring Glossaries
000s	25.00%	11.11%
100s	80.00%	0.00%
200s	30.00%	10.00%
300s	66.67%	0.00%
400s	75.00%	22.22%
500s	90.00%	0.00%
600s	70.00%	30.00%
700s	50.00%	20.00%
800s	0.00%	0.00%
900s	45.45%	9.09%
Total	53.41%	10.20%

Not only did children's books feature many more glossaries overall than their counterparts in the adult non-fiction section, but those titles that did feature glossaries were much more extensive. When taking book length into account, the ratio of the average number of glossaries to page numbers in the children's section was 1.08 while in the adult section this ratio was only 0.48.

4.4. Suggestions for Further Reading

Suggestions for Further Reading was the fourth most common access feature in children's non-fiction books, but the second least common in adult non-fiction books at 47.19% and 16.49% respectively. All DDC classes in the children's section included at least some titles that provided this access feature, though it was most common in the 100 class (philosophy and psychology) at 80%. In the adult section, none of the books surveyed featured suggestions for further reading in the 200 (religion) and 400 (languages) classes.

Table 5, Percent of Non-Fiction Books Featuring Suggestions for Further Reading

DDC Class	Children's Books Featuring Further Reading Lists	Adult Books Featuring Further Reading Lists
000s	37.50%	11.11%
100s	80.00%	10.00%
200s	20.00%	0.00%
300s	77.78%	11.11%
400s	33.33%	0.00%
500s	60.00%	20.00%
600s	50.00%	22.22%
700s	40.00%	10.00%
800s	14.29%	60.00%
900s	63.64%	18.18%
Total	47.19%	16.49%

4.5. Bibliography

Bibliographies, or lists of works cited and sources, were the second least common access feature for children's non-fiction and the third most common for adults at 19.10% and 40.82% respectively. In both children and adult sections, this access feature was most common in the 100 class (philosophy and psychology).

Table 6, Percentage of Non-Fiction Books Featuring Bibliographies

DDC Class	Children's Books Featuring Bibliographies	Adult Books Featuring Bibliographies
000s	12.50%	33.33%
100s	40.00%	60.00%
200s	10.00%	30.00%
300s	11.11%	33.33%
400s	11.11%	33.33%
500s	10.00%	50.00%
600s	30.00%	50.00%
700s	10.00%	40.00%
800s	28.57%	30.00%
900s	36.36%	45.45%
Total	19.10%	40.82%

4.6. Endnotes

Endnotes were the least common access feature in non-fiction books for children, appearing in only 6.74% of the titles surveyed. The vast majority of titles surveyed did not feature them at all, and they only appeared rarely in the 100 (philosophy and psychology), 600 (technology), 700 (arts and recreation), and 900 (history and geography) classes. They were more popular in adult

books, featured in 37.11% of titles throughout the DDC, except in the 000s class (computer science, information, and general works). None of the titles surveyed featured footnotes.

Table 7. Percentage of Non-Fiction Books Featuring Endnotes

DDC Class	Children's Books Featuring Endnotes	Adult Books Featuring Endnotes
000s	0.00%	0.00%
100s	20.00%	40.00%
200s	0.00%	90.00%
300s	0.00%	44.44%
400s	0.00%	50.00%
500s	0.00%	50.00%
600s	10.00%	30.00%
700s	10.00%	30.00%
800s	0.00%	20.00%
900s	27.27%	18.18%
Total	6.74%	37.11%

4.7. Total Number of Access Features

In all, the children's non-fiction books surveyed had almost exactly the same average number of access features as the adult non-fiction books (2.79 to 2.78). However, the children's section is home to more extremes in this area than the adult section, as shown by the detailed results in the table below:

Table 8. Average Number of Access Features in Non-Fiction Books

DDC Class	Children's Books Average Number of Access Features	Adult Books Average Number of Access Features
000s	2.50	2.22
100s	4.20	2.90
200s	1.90	2.90
300s	3.22	2.89
400s	2.11	2.67
500s	3.40	3.20
600s	3.20	3.20
700s	2.50	2.80
800s	1.43	2.60
900s	3.40	2.40
Total	2.79	2.78

5. Discussion

This study found that access features in children's non-fiction books are, on the whole, equal in prevalence to those found in their counterpart adult books, although the popularity of certain access features varied by level and subject. Adult books were much more likely to feature bibliographies and citations, perhaps because adult readers expect these academic standards for an author to prove where they received their information. However, with greater emphasis being placed on research at younger and younger ages, it's clear that children should be expecting this same level of academic openness on the part of their authors. It's also possible that authors of children's non-fiction do not adequately cite their sources because these sources might be too complicated for their younger readers to understand, should they try to look them up for their own research. However, many non-fiction authors have indicated that they use children's books as major sources of their research to some degree (Broadway & Howland, 1991; Galat, 2011). Also, the main purpose of bibliographies or endnotes is not to subsume the role of the suggestions for further reading, especially in books for children where such accompanying reading lists are common. Rather, these citations provide an excellent model for students of the academic rigor and thoroughness they should strive for in their own research.

On the other hand, children's books were far more likely to feature glossaries and suggestions for further reading than adult non-fiction books. This result is in keeping with the assumption that children have less background knowledge about particular subjects and the world, and may be turning to information books as their first introduction to a topic. As such, they will have more need of a glossary for defining vocabulary words they may not have encountered previously as well as a list of other places they might look for more information. It's possible adult authors assume their readers are more sophisticated and capable of finding these kinds of resources for themselves by using a dictionary to define words, for example, or searching for other works independently. It's also possible that adult authors feel no need to provide a list of further resources when they have also used a bibliography as an access feature, which might serve both functions for adult readers.

Though logically some subjects must lend themselves more to certain access features, a recognizable pattern did not develop. Children's books included more access features than adult books in all subject areas except: religion (200s), language (400s), arts and recreation (700s), and literature (800s). The category that featured the least access features was literature (800s) for children and computer science, information, and general works (000s) for adults.

6. Limitations

This study is the first to examine the extent of access features available to juvenile researchers in children's non-fiction, and therefore has no basis for comparison besides the statistics gleaned from the adult section of the same library. Future studies with a wider range of data from different locations would be helpful for benchmarking. This study also had a comparatively small sample

size of only 100 books from each section. Though this might be enough to make generalizations about the state of the non-fiction collection as a whole, results subdivided by Dewey Decimal Class could be more accurate with a larger survey.

7. Conclusion

This study attempted research into the availability of access features in children's non-fiction, a subject which has yet to be addressed fully despite demands from curriculum to use these books more academically in the classroom. Educators have redefined their goals for our changing society, wanting to guide children to reach their full potential as thoughtful, informed researchers with the skills to evaluate resources and locate information on any topic. As both public and school librarians, we have a duty to support the educational goals of our community and assure that our non-fiction collections are filled with quality resources for research on a variety of levels. One marker of quality for non-fiction books, especially when used for serious research, is the presence of access features to aid the reader in effectively finding the desired information, whether that is a specific subject within the text or other helpful resources like the one they have already found. These access points are imperative because without them the most informative and helpful book in the world would be rendered useless. Our resources are only as good as our ability to find them, and access features all provide key ways of doing so.

Children will be unable to fully appreciate the academic research process without practicing it for themselves, a process which would ideally start as soon as possible. Without the tools to accomplish an information search, they will be unprepared for the countless such searches necessary in modern life. Modeling expected behavior is also an important part of teaching-how can we expect children to accurately cite sources if the resources we provide for them do not?

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