Indexing children’s information books

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Discusses some of the findings of a British-Library-sponsored investigation of indexes to children’s information books with particular reference to the importance of book indexes, the presentation of indexes, the indexing process including the cost of producing the index, the standards of children’s indexes and the features of indexes which appeal to and confuse children. Some of the recommendations of the final report are given, including the recommendation that all children’s information books should contain indexes and that these indexes should be compiled by professional indexers.

In July 1997, the authors completed an investigation of indexes to children’s information books on behalf of the Liverpool Business School at Liverpool John Moores University and the Society of Indexers and with the financial support of the British Library Research and Innovation Centre. The aims of the investigation were to identify the quality of indexes to children’s information books and, if necessary, to make proposals for improving the effectiveness of such indexes. Specifically, the investigation sought to:

- investigate the opinions and attitudes of librarians, teachers, indexers, parents and writers of children’s non-fiction to children’s book indexes and children’s use of them;
- investigate the views of children’s book publishers with regard to indexes;
- clarify and assess the importance of book indexes for children;
- identify and analyse the problems encountered by children when using various indexing styles;
- investigate the processes involved in indexing children’s books;
- identify the most appropriate index entries and locators for children;
- identify the range of styles in index layout and design available in children’s information books;
- identify which index styles children find helpful;
- make recommendations as to the ideal index style in books for children at National Curriculum Key Stage 2.

It was decided to focus on children at Key Stage 2 of the National Curriculum (aged 7 to 11 years) because this is a particularly important period in the education process — a time when children are developing judgement and poise, becoming increasingly independent of adults and deeply interested in finding out about things (Lee 1984). Sweetman asserts that, to all intents and purposes, Key Stage 2 restores the disliked eleven-plus examination, as a child’s performance at this level could affect his or her acceptance at secondary school (Sweetman 1992). Key Stage 2 is a period of development that has implications for entry into secondary schooling and pupils’ approach to work.

Sampling and data collection

The samples used in the investigation were selected on the criteria that they were children at Key Stage 2 or adults who had knowledge or experience of children at Key Stage 2.

The children’s sample comprised two groups of children from each of four years in Key Stage 2 (Years 3–6). The two groups in each year were taken from different schools in order not to limit the results to children from only one educational and sociological environment. Work was carried out with 154 children in four schools, chosen from different catchment areas in order to include children from different backgrounds, ethnic origin and educational standard. The four areas chosen were Cheshire, Cumbria, Greater Manchester and Leicestershire. All school visits were arranged through the appropriate head teacher. The children completed worksheets, arranged word cards alphabetically and searched for information via the indexes of a number of books.

The adult sample consisted of indexers (mainly, though not entirely, of children’s books); librarians with experience of working with children; teachers of children at Key Stage 2; parents of children at Key Stage 2; writers of children’s books; and publishers of children’s information books. Questionnaires were sent to these people following piloting with two children’s librarians and staff of Liverpool John Moores University and Loughborough University. Of the 180 questionnaires sent out, 114 completed questionnaires were received, giving a response rate of approximately 64 per cent. Twelve follow-up interviews were conducted in order to discuss the questions in greater depth; we had hoped to interview more people but most respondents preferred simply to complete questionnaires.

The response rate from publishers was disappointing — only 40 per cent (16 publishers) returned questionnaires and none was willing to be interviewed. Several major publishers did not respond.

The importance of book indexes

Ninety-nine per cent of the participants in the investigation felt that all children’s information books should have indexes. A children’s book reviewer commented that the presence of an index ‘suggests a respect for readers’ needs’. All 16 publishers stated that children’s information books should have indexes, describing them as ‘essential’ and ‘invaluable’ and offering ‘a detailed guide’ to a book. In spite of this, however, fewer than one-third of the publishers stated that they always included an index in their publications. Reasons for not including an index were:
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- arrangement of book (25%)
- minimal text (18.8%)
- not for school market (6.3%)
- editor is restricted (6.3%)
- lack of time (6.3%)
- lack of space (6.3%)
- activity book (6.3%)

Three publishers commented that indexes should be included only where absolutely necessary and not for dictionaries or other alphabetically arranged texts.

The children were emphatic in their view that information books should have indexes. Some were surprised to find that the book from the school library which they had chosen to work on did not have an index, because they had assumed that all non-fiction books would have an index. One nine-year-old, on learning that not all non-fiction books contained an index, commented ‘well, they should do, shouldn’t they?’ All the children who had chosen a book which did not contain an index were very disappointed and one 11-year-old asked ‘How are you supposed to find anything without an index?’

The devisors of the National Curriculum for England and Wales (Department for Education 1995) are presumably convinced of the importance of indexes, since they state on page 14 that ‘pupils should be taught how to find information in books and computer-based sources by using organisational devices to help them decide which parts of the material to read more closely’ — and the most important of these devices must surely be the index. Elsewhere in the National Curriculum it is stated that pupils should be taught how to use library classification systems, catalogues and indexes.

Indexes and book sales

We asked librarians and others whether the absence of an index would prevent them from purchasing a children’s information book, and 70.5% of respondents said that it would. A professional adviser to youth and school libraries stated that a book without an index contradicts the principles of stock selection and is far less likely to be purchased. Librarians who work for Schools Library Services stated that their services recommend that children’s books without indexes should not be purchased for use in schools unless there was an exceptional reason for doing so.

One publisher noted that librarians and suppliers are discouraged and unlikely to buy children’s books without indexes, while another commented that the lack of an index would certainly influence teachers’/librarians’ buying decisions. Another publisher believed that it ‘looks sloppy to reviewers, library buyers and teachers’ not to include an index in an information book for children. More than half the publishers felt that book sales could be affected by the absence of an index.

Presentation of indexes

Many respondents highlighted the importance of a reasonable font size for indexes, suggesting that the text of the index should be the same size as the text in the rest of the book — though only four of 30 children’s books selected from one school library used the same font size for text and index. One teacher commented that making the index text smaller than the text for the rest of the book made the index seem ‘less important’ to children, so that they would be less likely to use it.

Many respondents suggested that large letters should be used as section headers in the index, one teacher noting that these are especially helpful when a child’s grasp of the alphabet is not strong.

It was felt by most respondents that subheadings should only be used when absolutely necessary, mainly when entries have more than four or five locators. Some people felt that subheadings could ‘hide’ information, as in one book that contained several subheadings under the meaningless heading ‘route’ but no entries for the individual subheadings, apart from a ‘see’ cross-reference from Himalaya Mountains:

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route
Calcutta 32, 33–34
Dhaka 18, 26, 34
Gangotri Glacier 7
Hardwar 8, 9, 23, 42
Himalaya Mountains 6, 7, 8, 9, 20, 43, 44
Kampur 30, 39
Varanasi 37
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Another book had an entry for

- animals
  - cats
  - dogs

but nothing under ‘cats’ or ‘dogs’.

Many children in our investigation displayed confusion or frustration because the word which they sought was ‘hidden’ as a subheading. For example, one nine-year-old had problems finding the subjects he wanted in a religious book because the indexer assumed that he would know that an altar would be a subheading of ‘Christianity’ and Ramadan would be a subheading of ‘Islam’.

Most respondents (64.3%) preferred word-by-word alphabetization to letter-by-letter, though a children’s librarian felt that letter-by-letter arrangement might help children to find a word more easily, as ‘a straight alphabet sequence’ is all they will have encountered. In fact, the children taking part in our investigation did not apply either word-by-word or letter-by-letter when using an index: many of them, when looking for a word in the index, went laboriously through all the words starting with the appropriate letter until they found the word they wanted. Ten children from each of the four years studied (years 3–6) were asked to arrange word cards alphabetically. Some of the older children (years 5–6) demonstrated an awareness of how the words could be arranged alphabetically by the first letter, then the second and third, etc., but they found it very hard to do and only two of them later applied this knowledge when looking for a word in the index. The younger children (years 3–4) tended to group similar words together (e.g. cats, cat flap, cat basket), but not to place them in a strict letter-by-letter or word-by-word sequence. Most of the children placed the root word before other related words, regardless of the alphabetical sequence: for example, ‘animals’ was placed before ‘animal house’ and ‘cars’ before ‘car battery’ and ‘car wash’. These results support the findings of Hartley, Davies and Burnhill (1981) that no one method of alphabetization (letter-by-letter or word-by-word) leads to better retrieval by children.

Some indexes (e.g. those for the Longman Book Project series) print the entire alphabet on the index page, in both upper
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and lower case, to help children to locate the letters. Most respondents (60.2%) felt that this was helpful, one children’s librarian noting that it could be particularly useful for dyslexic pupils and did not require too much space.

Although illustrations are obviously very common in children’s books, they are not always indexed and, when they are indexed, the locators do not always distinguish illustrations from text. The vast majority of respondents (81.6%) felt that illustrations should be indexed, the head of one Schools Library Service stating that illustrations are often more important to children than text, as children live in a very visual world of pictures, posters, television, CD-ROMs and computers. It was also felt by most respondents (74.5%) that distinctions should be made in the index between entries referring to text and entries referring to illustrations, the following methods being suggested:

- italics (32.7%)
- bold type (27.6%)
- colour (13.3%)
- ‘illus’ or ‘pic’ after locator (11.2%)
- separate index (9.1%)
- symbol (4%)
- box around locator (3%)
- different font or font size (2%)

Locators are normally in the form of page references, though the heading ‘Pages’ was rarely given, causing confusion to some children. An exception is the Ladybird series of information books.

Some children were confused by the use of hyphens to indicate page ranges: for example, a number of children asked ‘what does 7 minus 10 make?’ when faced with the page range 7–10. Because of this we made a recommendation that, with hindsight and bearing in mind the recommendation of BS ISO 999, it is perhaps unfortunate: that the use of hyphens to denote page ranges (e.g. 7–10) should be avoided and all numbers printed instead (e.g. 7, 8, 9, 10). We now accept that this recommendation could be a mistake. We are not happy, however, about the comments of a distinguished Canadian indexer, following the Society of Indexers conference in Dublin of 1997, that ‘it is outrageous to suggest that because some children are confused by hyphens, all children should be given misleading information’ and that ‘indexers should refuse to participate in the current trend to cater to the lowest common denominator’. We feel that indexes should be user-friendly and should therefore be amenable to the needs of the children who are using them. It may be, of course, that Canadian children are very much brighter than English children, though we find that hard to believe. This indexer’s suggestion that the use of hyphens should be explained in an introductory note is more acceptable — except that few indexes to children’s books contain introductory notes and that, where they are provided, children tend not to see them.

Strings of locators were also found to be unhelpful — as, of course, they are in indexes to adult books. Many respondents highlighted the need for all pages in a book to be numbered in order to help children in locating information.

Cross-references were not found to be a typical feature in children’s books and, where they were employed, there was no explanation of their use. Most respondents (77.6%) thought that cross-references should be used in children’s indexes. One children’s librarian noted that children are not always capable of lateral thinking when searching for information, and many respondents pointed out that cross-references can help by suggesting alternative or related terms. A minority of respondents (12.2%) felt that the words ‘see’ or ‘see also’ were confusing to children and should be replaced by such phrases as ‘also look up’ or ‘try the word…’ — or by multiple entries. Most of the children in our investigation found cross-references very difficult to understand. Sixty-one per cent did not understand what was meant by ‘see also’ in an example given.

A minority of respondents (23.5%) favoured the use of phrases rather than subheadings in children’s indexes (e.g. ‘hunting of seals’), while others felt that this was simplistic or even condescending. Some indexes were found which used meaningless phrases such as ‘introducing a second budgie’.

There was no consistency evident in the use of capital and lower-case letters in indexes to children’s books. Some use an initial capital for every word, while others use lower case except for proper nouns (as recommended in BS ISO 999). Most respondents favoured using lower case, except for proper nouns, since this would help children to see capitalization used correctly and would be in line with the teaching of grammar.

As previously stated, introductory notes are not often found in children’s indexes. When they are there, they are not always helpful because they use terminology not easily understood by children, such as ‘caption’ and ‘entry’. Many of the children in our study were unable to locate introductory notes that did exist, a typical response being ‘I didn’t see that.’ This supports the views expressed by some questionnaire respondents that introductory notes to children’s indexes are not prominent enough and are therefore not noticed by children.

A minority of respondents (16.4%) argued that an introductory note would not be read, or that it was not the publisher’s job to teach children how to use the index, or that, if an index requires explanation, then it is too complicated for children. However, the vast majority (80.6% of respondents) thought that an introductory note about the index would be helpful for children. Miller asserts that, although many readers (adults and children) may not read introductory notes, ‘for those who will, a few rules, simply stated, will give assistance’ (Miller 1973).

The indexing process

Indexes may be disturbed by the fact that eight of the 16 publishers who submitted questionnaires never use a professional indexer. The other eight publishers occasionally use a professional indexer, mainly for larger works. The general tendency is for the editor to compile the index, though some publishers felt that the author is the right person to do this. Two parents also thought that authors should produce their own indexes. In contrast, several respondents, including one author, suggested that indexing should always be done by a professional indexer. A librarian stated that a professional indexer is always preferable to an amateur but that perhaps publishers feel that the cost is not justified for children’s books.

The vast majority of respondents (almost 95%) felt that collaboration between indexer, publisher and author is desirable, several of them stressing the importance of such collaboration by using the word ‘definitely’ on their questionnaires. One
indexer felt that a competent indexer can work alone, unless the book is very complex, and should be allowed to do so. Two indexers felt that a huge educational job needs to be done on authors and publishers. One wrote: ‘A publisher may need persuading to allocate sufficient space for a general index with plenty of alternative entries and cross-references.’

Most librarians, indexers, teachers and parents felt that a child’s book indexer should have knowledge of a book’s subject, but there were exceptions including the following comments:

- Most educated adults will have sufficient knowledge if the book is well-written (librarian).
- An indexer is trained in the skill — or should be — and normally is not in need of an in-depth knowledge of the subject (librarian).
- Could be an advantage not to have subject knowledge — a simpler index might result. Knowledge of indexing is more important (librarian).
- To an extent, but any competent indexer should be able to deal with subjects at this level. Indexing knowledge much more important (indexer).
- Generally not difficult to acquire relevant knowledge from the book itself (indexer).
- A good indexer should be able to create a good index to any book aimed at children (indexer).
- Reading the book before attempting the index should be sufficient for a children’s book (unlike an adult book, where specialist knowledge is needed) (indexer).
- Not necessarily — not practicable (researcher).

Many respondents felt that a knowledge of the special requirements of the child’s age group is far more important than a knowledge of the subject.

Several respondents identified differences between indexes to children’s books and indexes to adult books, but these did not always agree. For example, a number of respondents suggested that there should be less detailed indexing in children’s books, while three felt that there should be more detailed indexing. Similarly, several respondents expected fewer subheadings and cross-references in children’s indexes, while two expected more subheadings and one expected more cross-references. Other responses included the following:

- Vocabulary should be appropriate to age level.
- Different type size and layout in children’s books.
- Take nothing for granted with children — e.g. they may not understand ‘113, 250’ or ‘13–14’ (several respondents).
- Write all page numbers (e.g. 11, 12, 13, not 11–13) (a children’s author).
- A common failing is to assume that the user knows the numbers refer to pages in the text.
- An index for children should be child-friendly, attractive, easy to use — using an index is a difficult skill.
- Visual clues useful.
- Understanding of children’s short attention span.
- The difference is as great as between writing for adults/children — e.g. use of language, level of understanding, complexity of terminology.
- Simplicity and clarity are extra important. The indexer should constantly bear in mind the age of the reader and the words/terms likely to be sought.
- First letter often highlighted.

A few respondents felt, however, that indexes to children’s books need not be very different from those to adult books, as indicated by the following comments:

- I feel very strongly that indexes for children’s books should be constructed with the same detail as those for adult books — and all information books should be indexed (librarian).
- The principles remain the same (indexer).
- It seems sensible for children to start learning the conventions to be found in adult indexes (indexer).
- The same principles apply, but the indexer of children’s books should be more generous in supplying alternative entries (indexer).
- The same principles of good indexing apply, but there are obvious differences in terminology, depth of detail etc. (researcher).

We asked publishers if they could indicate the cost of producing an index to children’s books. Some replied ‘nothing’ because the index is done in house or by the author, while other responses included:

- £50–150.
- On average, £100 to the indexer plus £100 of editor’s time.
- Usually pay around £80 for index to a 48-page book.

Six of the publishers who submitted questionnaires normally pay the Society of Indexers’ recommended minimum rate for indexers, while three do not. One wrote ‘I think so; I’ve never had any complaints.’ The others did not reply or stated that the question was not applicable to them since their indexes were always compiled by the editor or author.

Publishers were also asked for the cost in time of producing an index to a children’s book and the following replies were received:

- Depends on content of book, age level.
- Varies; 4–6 hours.
- 1–10 hours, depending on book.
- 1–3 hours is typical.
- Approximately 2–2½ hours.
- One day.
- Even the smallest indexes can take days of discussion and revision.
- A day for the indexer, plus a day for the editor to brief and edit.
- Depends on complexity of work and competence of indexer. Can be very time-consuming when they go wrong!
- A couple of hours to a couple of days.

When asked what is the cost in money to the author of including an index to a children’s book, most publishers either did not reply or stated ‘nothing’. One publisher stated that, depending on the contract, authors might be required to meet the cost of an index. The following replies were received with regard to the cost to the author in terms of time:

- Difficult to quantify, but an estimate would be 10 hours for a 128-page paperback such as we publish.
- Often they are asked to comment on the editor’s index, so perhaps half a day. If they are compiling their own index, perhaps a day. There will usually be additional discussion time.
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- Depends on the book, of course. A good, full index takes a lot of time and patience.
- A few hours’ pleasant work.

Standards of children’s indexes

A rather emphatic message from the questionnaire results is that only half of the respondents thought that children’s book indexes allow information to be traced easily, and many of those who did added such comments as ‘generally’, ‘usually’ or ‘more often than not’. A number of respondents felt that the layout and design of children’s book indexes could be improved. A teacher commented that CD-ROMs encourage children to try harder to locate information through various pathways, while others noted the enthusiasm and competence with which children use CD-ROMs, suggesting that the style, colour, pictures and ‘help’ facilities are helpful to children.

Many comments on the standard of indexes to children’s books were unfavourable. The head of a schools library service pointed out that many children’s books are being imported and translated to save money and that this leads to poor-quality books and poor-quality indexes. Another respondent stated that too many children’s books are of a low standard and that ‘there is no point in having a good index if the book is poor’. A school librarian commented that she had seen an improvement in indexes during her ten years’ experience and that it is now rare to find a book without an index, but that the quality of some indexes ‘leaves much to be desired’.

One indexer had worked with groups of Year 6 pupils about ten years ago, using children’s picture encyclopedia/‘my favourite science encyclopedia’-type books. Articles covering 2–3 pages were chosen and the children decided which were the key topics on each page. If the topic was in the index and the locators were accurate, the book got a point; if not, the children got a point. The children usually won!

Other comments on the standard of indexes to children’s books included:
- It is comparatively rare to find a ‘good’ index, and children are usually discouraged.
- It’s amazing how many books have bad/boring/useless indexes while at the same time they have good/useful glossaries.
- Headings are often badly chosen and the layout is sometimes poor.
- Children’s indexes are generally mediocre, as if done by a computer without taking the user’s viewpoint into account.
- Most children’s indexes seem to be cut-down adult indexes but without the quality.
- Indexes seem to be done as add-ons or afterthoughts.
- Too often an index appears to be included because it ‘should’ be there, but who is given the task of compiling it? There is little evidence of trained expertise in most examples.

One fault identified by many respondents and found in examples studied during the research is the indexing of ‘passing mentions’. Neate (1993) rightly asserts that such entries do more harm than good, as the enormous effort of the child is not rewarded with useful information, while Von Schweinitz (1995) describes the mere mention of an indexed word as one of the most common frustrations in children’s indexes.

Strings of locators are another common fault, sometimes linked with ‘passing mentions’. Gordon (1983) and Miller (1980) have described finding a string of page references as exasperating for young readers. Reid and Bentley (1996) describe the futile hunt around numerous pages that some children’s indexes create: the desperation of the reader searching for the word on a page, only to find that the reference is so fleeting that it was not worth the time spent.

Several children participating in our study were disheartened by the indexing of ‘passing mentions’ and the inclusion of strings of locators. One 9-year-old commented, after missing two passing references in succession, ‘I can’t find anything — this index doesn’t work.’ An 11-year-old, faced with a long string of page references, asked ‘Do I really have to look up all these pages? This is going to take forever.’

The children’s ideal index

The following were the children’s answers when asked what made their index easy to use:
- alphabetical order (67.5%)
- page numbers (17.5%)
- section headers (8.5%)
- large writing (3.2%)
- sections (2%)

Asked about the difficulties faced when using indexes, they replied:
- small writing (21.4%)
- no section headers [i.e. ‘big letters’ to show where a group of words starting with the same letter began] (21%)
- too long [i.e. indexes of more than one or two pages or with a large number of entries] (18.2%)
- no sections [i.e. spaces between groups of words starting with the same letter] (14.3%)
- the words (11%)
- no alphabetical order (9%)
- when word isn’t there (5.2%)
- lots of page numbers (2%)
- cross-references (0.6%)

Spelling was another problem: one must be able to spell if one is to use an index effectively. One child, for example, spelt ‘giraffe’ as ‘draf’. However, some children with spelling difficulties used the index to correct their spellings, demonstrating the value of an index as an educational tool.

One observation is that the children could be very slow in finding a word in the index, choosing a page reference, finding the appropriate page in the book and then finding the word on the page. Many children found the process extremely laborious, and the slightest impediment at any stage was very distracting to them.

It was interesting that 11.7% of the children claimed to find nothing difficult about using indexes. Since most of them had struggled with some aspect of their index, this claim appears to have more to do with the children’s wish to impress than with the reality of their experience!

Conclusions

The final report of our investigation (Williams and Bakewell 1997) contains more detail about the matters mentioned in this article,
together with copies of the questionnaires, a full statistical analysis of the responses, examples of worksheets completed by the children and examples of indexes. The report contains 21 recommendations, the first two of which are that all children’s information books, without exception, should contain indexes and that these indexes should be compiled by professional indexers.

Other recommendations include:

- There should be communication between indexer, publisher, editor and author.
- The indexer should have some knowledge of the subject of the book being indexed and the age group of the child.
- Children should be taught how to use indexes and encouraged to use indexes at school.
- Children’s indexes should not be seen as simplified versions of adult indexes, but compiled with the capabilities of the child in mind.
- Passing references to subjects should always be excluded from the index.
- Subheadings should be used carefully and only when absolutely necessary.
- Cross-references should be kept to a minimum and the meaning of ‘see’ and ‘see also’ should be explained in an introductory note.
- Double and multiple entries should be used wherever possible, especially for difficult terms and subheadings.
- Lower-case letters should be used for all entries except proper nouns, as recommended in BS ISO 999.
- Illustrations should always be indexed and distinctions should be made between references to text and references to illustrations. Symbols or boxes should be used for references to illustrations, as they are familiar to children, who may fail to recognize or be confused by italic or bold type.
- User-friendly introductory notes to the index should be provided.
- Indexes should be allocated a page or pages of their own and not fitted on to a final page of text as though an afterthought.
- Printing the entire alphabet, in upper and lower case, on the same pages as the index, would serve as a helpful reference point for children.
- Sections and section headers, to denote and highlight groups of words starting with the same letter, help children to locate words in an index.

References


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