

“That doesn’t look like I thought it would”: A study into the effectiveness of picture book cataloguing at the University of Canterbury Library

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This study explores the topic of whether or not library catalogues are meeting the needs of different user groups. This was narrowed down to focus on early childhood teaching students at the University of Canterbury and how they select picture books using the University’s library catalogue. In doing so it identifies what metadata this group look for when selecting an item and found that these are not reflected in the current catalogue. This took a qualitative approach which combined structured interviews with the verbal protocol analysis method in a three-part approach. Participants were asked a series of questions during the first and second parts, then asked to think out loud as they selecting items during the second stage. Throughout this process no prompts were provided from the researcher in an attempt to capture their natural thoughts. Data collected showed that early childhood teaching students have specific needs when selecting picture books which impacts the type of metadata they are drawn to. These are a result for the need to find books which entertain and engage young children while aligning with the New Zealand Early Childhood Curriculum. It was found that these needs were not reflected in current picture book records at the University of Canterbury which creates challenges when selecting items. Understanding the behavior of this user group can help to inform cataloguers at the University of Canterbury to create or edit records to improve the selection process. On a wider level, there is the potential to explore this topic in future studies to support libraries in creating systems which reflect the needs of their users.

Keywords: cataloguing, usability, picture books, metadata, bibliographic record, selection

Since shifting from card to online, cataloguing has undergone a number of changes which has improved the efficiency of a search and access to resources. As the catalogue is the access point for interacting with the library’s resources, it is essential that libraries have standards in selecting and displaying the metadata to accurately represent an item and assist retrieval. It is metadata which has the greatest impact on retrieval as this is what locates the results and allows the user to determine their relevance. Without the appropriate metadata, the quality of a search is affected and users struggle to locate items (Kreigsman, 2002, as cited in Lopatin, 2010). If online records do not have well-constructed and organised information, individuals are unable to find what they need (Beak & Olsen, 2011) and the library is unable to fulfill its purpose.

The purpose of this research was to explore hypothesis that modern cataloguing does not capture resources in a way that reflects the needs of its user groups. It is rooted in the argument that libraries today should acknowledge the metadata valued by different groups and use this to create effective online records. Coyle (2016) has highlighted this problem with the argument that modern cataloguing records are based on MARC standards which reflect earlier card catalogues and neglect to account for variances between items such as DVDs and books, while often downplaying characteristics valued by different user groups. While there have been cataloguing developments such as the RDA, Coyle and Hillmann (2007) argue that this too remains in the past as a key factor of the design is the focus on adding data to current catalogue records in order to remain compatible with MARC and existing library systems.

In order to explore this, a study was conducted focusing on how picture books were selected by the early childhood teaching students at the University of Canterbury. Located in Christchurch New Zealand, the University is home to the College of Education, Health and Human Development which attracts a number of teaching students from around the country and subsequently has a wide range of picture books in its library. Picture books were used as it has been argued that standard library cataloguing was not created specifically for children’s collections (Beak & Olson, 2011), however the limitations were yet to be looked at from the perspective of early childhood teachers. As a user group, early childhood teaching students have specific needs as they use picture books in the classroom to achieve the key competencies outlined in New Zealand’s Te Whāriki: Early Childhood Curriculum. The curriculum itself promotes the use of picture books as it argues “words and books can amuse, delight, comfort, illuminate, inform and excite” (New Zealand Ministry of Education, 1996). Despite this specific need, the UC records at the time of this research followed MARC format and RDA standards which Sprochi (2016) argues do not take into account elements required by today’s users. As a result, records do not always use metadata which relates to the themes or lessons they are required to teach, and locating items is heavily reliant on the help of the library staff.

In this context, the following research questions were developed;

- What metadata in a bibliographic record helps student teachers choose picture books that help them learn about applying the curriculum?
- To what extent are the University of Canterbury records currently meeting these requirements?
- This research aimed to establish if there was a problem in cataloguing picture books by first determining what metadata this user group valued and determining if it was reflected in current records.

It has already been established that picture books can help achieve literacy. Bamkin, Goulding, and Maynard (2013) looked at story time sessions in New Zealand mobile libraries and concluded that through listening, children were introduced to new words and grammar patterns which had a positive impact on their linguistic and literacy skills. In another study of New Zealand public library story times, Goulding, Dickie, Shuker, and Bennett (2014) identified six key pre-literacy skills and outlined how these can be developed through various features of a picture book. For example, rhyming words and pop-up flaps encouraged children's interest in books and developed their print motivation, while asking questions about a story helped to build narratives skills. Despite the link between literacy and picture books, interviews with library staff conducted by Goulding and colleagues (2014) revealed that literacy development did not come into play when making book selections. When questioned about *Te Whāriki*, participants expressed little awareness or concern over how this could be incorporated into the library, often commenting that developing literacy was a teacher's responsibility (Goulding et al., 2014).

In addition to literacy, reading is also a significant way of influencing children's social development. Phillips and McNaughton (1990) found that children who were read to on a regular basis demonstrated the ability to construct narrative as they were able to discuss the stories without any prompting from their parents. An explanation of this was provided by Ryan (2010) who analysed the the psychology of listening and found when a story evoked pleasure, children were likely to make associations with the book and develop narrative skills. Other studies have found that reading helps to develop a sense of self, an argument expressed in *Te Whāriki*, which states that books with characters or stories that children relate to helps to develop their identity and understanding of the world (New Zealand Ministry of Education, 2012). In their study of how picture books were used in the classroom, Daly and Blakeney-Williams (2015) found that children were more likely to engage in self-reflection and share stories if they related to a story. This created a sense of community in the classroom but also helped individuals develop a sense of self (Daly & Blakeney-Williams, 2015).

These studies comment that literacy and social development is not developed unless children enjoy the story. The librarians interviewed by Goulding and colleagues (2014) stated that they prioritise finding books children would love, with one participant summering "a love of reading because all else comes from this." There has been research into what attracts children to books, significantly the work from Maniam (2011) which gave a group of five year olds one hour to choose from 200 picture books after which time interviews were conducted questioning their motivation behind their selection. The results identified the book cover and title as crucial in children's original engagement and subsequent enjoyment of a text (Maniam, 2011). This was supported by Beak and Olson (2011) in a comparison of metadata schema for children's books which identified colour, book length, and feelings associated with a story as important elements for children.

As adults are often selecting books on behalf of children, it is essential that the catalogue accurately represents an item so they can find a book the child or children will enjoy. This was looked at by Švab and Žumer (2015), who looked at picture book records in a public library catalogue. Using parents of young children, Švab and Žumer gave participants six different bibliographic records for the story 'Cinderella' and asked them to select one. They were then given their chosen item to look through, before being given all six picture books and asked if their choice had changed and why (Švab & Žumer, 2015). The research found that bibliographic records frequently left out details indicating whether or not children would enjoy the book such as illustrations and arrangement of the text (Švab & Žumer, 2015). Not only does this indicate that current cataloguing practices are insufficient for picture books, but it raises the question of whether other user groups would have the same experience and again highlight the need for further research.

While research on what teacher's value in a record is currently limited to a few publications, these can be reviewed to draw conclusions as to how this user group selects picture books. In their study, Blakeney-Williams and Daly (2013) found that picture books were an integral part of all classroom activities as they were used in visual arts lessons, drama and general research into countries or animals featured in the stories. Bradley and Jones (2007) drew similar conclusion in a study looking at reading sessions in thirteen different classrooms. They concluded that teachers develop literacy by introducing the sounds and shapes of letters to show children how these create words (Bradley & Jones, 2007). Their research also found that the structure of a book impacts what teachers focus on when reading to a class. For example, books which had a high amount of alliteration could be used to encourage talk about letters and sounds (Bradley & Jones, 2007). While this research does shed light on what metadata teacher's value, it also presents a gap as there were no interviews conducted with members of this user group. We can see there is a complexity to selecting items from a catalogue and recognise the need to explore what early childhood student teachers value in a record.

Methodology

One of the challenges in evaluating a library catalogue is the inability to simulate real-life information seeking (Hider & Freeman, 2009). In recognising the need to keep this research as natural as possible I employed the verbal protocol analysis methodology which asks individuals to articulate what is going through their mind while performing a task. This is based on the theory that people cannot contain too many thoughts in one moment and speaking freely gives an insight into their mind (Hilder & Freeman, 2009). There are risks with this approach as unstructured talking may create an abundance of data to analyse, however a study from Morrison (1999) concluded that the verbal protocol method is successful when used in combination with interviews in order to provide a rounded set of data. Employing two methods does raise the issue of doubling the opportunity for error, however it was felt that these can be avoided due to the smaller scale of this project and the involvement of participants in checking their transcripts.

Population Sample

For this research eight participants in their final year of an early childhood degree were selected as this level have completed two years at UC and therefore represent the first and second year students. It was assumed that as third year students have had the most experience in a center, they would be able to draw on past experiences and provide more detailed data. It is important to recognise that this study was conducted using a sample of the population at one organisation, therefore results cannot be directly applied to other user groups and do not speak for the entire library catalogue. There is, however, the opportunity to use this method to examine other resources and user groups in future research projects.

Participants were selected with the assistance of academic staff who coordinate the third-year program. The staff were extremely supportive and posted a message for third year students on the online student message board inviting them to an informal meeting about the research project. In order to create a realistic representation of the selection process six bibliographic records were chosen with the assistance the Education Librarian. All items have a math's focus which reflects *Te Whāriki* recommendation that early childhood teachers introduce children to everyday math such as counting, comparing sizes of objects, theories and vocabulary (New Zealand Ministry of Education, n. d.). The Education Librarian had created a list of math-related picture books that can be found on the library website, thus aligning with Hilder and Freeman's (2009) argument that we can control a design method to make it more relevant to a real-life situation. The smaller number of participants and bibliographic records were employed in response to the concern that qualitative research can result in an overwhelming amount of data which is difficult to analyse (Silverman, 2011). In limiting these factors I was able to ensure that the data collected could be organised and interpreted given the time constraints and logistics of this research project.

Data Collection

This methodology was adopted from Švab and Žumer's (2015) research as it also focused on how picture books are selected by a specific user group. Using this as a model, I divided the project into three parts: interviews, a bibliographic selection activity and post-selection interviews. Data was collected using a combination of structured questions in parts I and III, and the verbal protocol analysis method for part II. All parts were recorded before being transcribed as it was felt that writing notes during the discussion may be off-putting or disrupt the thinking-aloud process.

Preliminary Interviews

Participants were first questioned on their current perceptions and use of the library catalogue, which were as follows;

- Describe how you currently use picture books both in the classroom and for your assignments or coursework.
- How do you generally select picture books and why do you use these avenues?
- Reflecting on your use of the catalogue, what information do you find helpful/unhelpful in an items description?

Selection of Picture Books

Participants were given six bibliographic records of picture books and asked them to rank each one in order of preference for classroom use. They were briefed on the verbal protocol analysis method before this and I refrained from offering any questions or prompts during this time in order to combat criticism that the researcher's presence may influence the thought process (Schooler, Ohlsson, & Brooks, 1993, as cited in Novotny & Cahoy, 2006). A time limit of fifteen minutes was imposed as the unstructured nature of verbal protocol analysis means it runs the risk of going on for too long, and once selection was complete the participants had five minutes to look through their chosen item.

They were then given physical copies of each book and again given fifteen minutes to choose one for a math-based lesson. I informed them that they could stick with their original choice and again asked that they employ the

verbal protocol analysis method while looking through each item. The intention was to identify participant's natural and immediate reactions to the comparisons of the bibliographic record to the physical book and determine if there is a problem with the catalogue.

Concluding Interviews

Structured interviews concluded the activity as by this point participants had a chance to reflect on their selection and were able to articulate more detailed responses. Although the thoughts articulated during the verbal protocol method will have captured some of these answers, it is felt that interviews can provide added detail and strengthen data quality. To begin the interviews, each participant was given a list of criteria for selecting an item before the following questions were asked;

- What surprised you about the book you selected when you were presented with it?
- What information were you looking for when making a selection?
- What information (if any) could be included in a record to help your selection?
- What information do you find unhelpful when making a selection, both using these bibliographic records and in general?

Results

Preliminary Interviews

When asked to describe how they use picture books, all participants replied that they were utilized to enhance a lesson and develop an understanding of a particular subject. They explained that picture books can make a topic more relatable to children and are particularly effective when talking about emotional concepts such as death or fear. Others described using picture books to teach science or math concepts or simply for entertainment.

In response to the question on their current picture books selection, a majority of the participants described a preference for using the public library as many were unable to make it to the University library during its opening hours. There was the option of requesting books online to pick up from another campus library at a more convenient time, however many commented that they preferred to look at the physical items as they explained that the catalogue often did not have the information they wanted. Comments included;

"They [picture books] aren't categorised as I would like so it's going to take at least an hour or so looking for books that I want."

"It's just impossible to decide if a book is right when you're looking online."

In reflecting on their use of the catalogue, all participants had experience using the UC records, which indicates that the problem is not with their searching skills but the records themselves. It was common for students to return books without ever using them as they did not meet their needs, while one individual described spending time looking through records and requesting several books for their class only to find that they "weren't right at all."

Participants also described a challenge in selecting books as each one has to be interesting to their specific group of children while also providing a connection to a lesson. The challenge of this was summarised by one with the comment "There are so many things you've got to think about as a teacher and you've only got maybe like 3 seconds to decide on a book or whether or not it's good or bad."

Participants also identified the class size and interests as motivating factors when selecting books with many saying that they did not like to select books until they had met the class. One remarked, "usually you don't know the children's interests until like the day of or the week of so it's very hard to try and plan for."

The engagement factor was also crucial when choosing a book as participants described looking for a book which is "interesting," "will hold their [children's] interest," or is "fun." The summary, illustrations, subject matter and cover image were identified as key details in determining children's enjoyment with commented including;

"I look for whether or not it's relatable to either what I'm trying to get across or if it's interesting or is it going to hold their interest or make them laugh".

Participants described developing lessons after an item had been selected, reflecting Daly and Blakeney-Williams's (2015) and Sturm's (1999) argument that individuals enjoy a story more if it is something they relate to. This showed that there was an awareness of the link between engagement and learning and that enjoyment came first.

"So if I'm looking for dinosaurs then I try to find everything that's related to dinosaurs or you know stories about friendships within the context of dinosaurs."

The illustrations in particular played an important role in selecting an item as these seemed to indicate if the children would find the book engaging and therefore increase its effectiveness in a lesson;

"I look at how cartoonish or how stylised the illustrations are, whether or not they're big or small, how big the book is in general."

"If it doesn't grab me visually then I will skip past it. Even if the story is really good."

Several of the participants also commented that they were interested in the size of the illustrations in relation to the text. Rather than the numbers of pages, most seemed to value the amount of text when it came to determining how long a book would take to read and if it would be too 'boring' for children.

"I never want anything with too many words on a page. That is just asking for kids to fidget"

Although a few mentioned that it was helpful to know the author, this did not appear to impact upon selection unless they were specifically looking for items and is not considered essential information.

Selection of Picture Books

After the interviews, participants were asked to select a book to use in an early childhood centre when teaching a lesson on maths. They were not told that all of these items were recommended as books with a math theme, and therefore had to use information in the catalogue to determine which item they felt was most appropriate. Participants were asked to think out loud throughout this process and I refrained from making any comments or questions.

The title was observed as the first detail participants looked at and appeared to be particularly important in determining a picture book's subject matter. All participants paused over items which had math-related vocabulary in the title and made comments such as;

"*Pete the Cat and his four groovy buttons* is obviously straight away math, it has got a number in the title."

"*One is a Snail, Ten is a Crab: a counting book*. So it's quite obviously going to be math related."

For others the title was also used to indicate enjoyment with one participant looking at *Pete the Cat* and saying "Straight away the title sounds like it might be more interesting and more fun." Another quickly dismissed *Mr. Archimedes' Bath* after struggling to pronounce the title and saying "I'm not sure how to pronounce that myself so the kids might struggle with it too. That sounds like it could be quite a boring book to be honest."

Records which did not contain any math-related vocabulary were rejected as participants assumed the book would not be useful to them. All participants set aside *The Doorbell Rang* after noting that the record contained only a brief summary with the subject headings 'sharing' and 'cookies.' Several seemed unsure about its appropriateness for a math lesson with the comments that it "might be helpful but it's very loose description" and "if it was about maths it would say so." This is problematic as the item was highlighted by one academic staff member as their favourite book to use when teaching numbers and counting to young children, yet the lack of information in the record prevented participants from considering it as a useful resource.

The subject headings were particularly valuable as many participants used these to determine an item's use in the classroom. *Pete the Cat and his four groovy buttons* was unlike the other records in that it contained more subject headings including 'counting,' 'singing,' 'animals' and 'happiness.' Several mentioned that this item could be useful for a variety of lessons and were pleased that it identified 'counting' specifically as opposed to the more generic heading of 'math.' Despite this, only one individual selected *Pete the Cat*. This participant explained that the item could be used for other subjects as children were more likely to respond positively to a lesson using a familiar story.

Items where the records did include math in the subject headings were still problematic as participants still found they were lacking in detail. For example, *One is a Snail, Ten is a Crab* had a brief summary which described the item as a counting story but did not say what this involved. This led participants to draw information from the title and assume the story only counted up to ten which individual felt was "too simplistic" and not a high enough number for a maths lesson.

After considering the title and summary, participants turned to the cover images to get a sense of the illustrations. This supports the earlier interviews in which participants emphasised the importance of illustrations, and Maniam's (2011) research in which participants were first drawn to the cover and colours of a book. Comments were made such as

"This looks nice and big. Well the pictures look really big which is good for a classroom."

The importance of this was reflected in the final choices as three participants chose *Fifty-Five Feathers* and four *One is a Snail Ten is a Crab* due to their colourful cover images and maths-related titles. The popularity of *Fifty-Five Feathers* revealed further details as participants were pleased to see that it was about New Zealand birds, one happily exclaiming "oh it's New Zealand! I love New Zealand resources," and another stating that "it's always good to use New Zealand books when you can." Similarly, while details on other editions or formats of the item were not identified as important, a number of participants appeared pleased that the record included a note on the Te Reo version of this story. One participant stated that "It's also published in Maori which would help." This was not expanded on during the observations, but it is likely that participants value New Zealand items for reasons explained in the curriculum that argues that picture books can help children to develop their sense of identity in New Zealand.

This decision did reveal some limitations in the catalogue as those who selected *Fifty-Five Feathers* were unsure of its length and size of the text. After selecting this item, one commented that they hoped it was "not too long as in each page has too many words." This was followed up with the statement "you don't want a story too long

for young children, they get bored and fidget too much,” validating the metadata described as important in the interviews.

The data identified from these observations was validated and expanded upon once participants were presented with the physical books. Only two of the participants were satisfied with their selections, which were *One is a Snail, Ten is a Crab* and *Pete the Cat*, while others were quick to point out problems with their choice. This was often due to the text which was either too long, or too small. An individual who had chosen *One is a Snail* commented that it did not have enough words on each page to make a lesson, while the participants who had selected *Fifty-Five Feathers* thought the small text which would make it difficult for children in a group to see. One made the comment that they in order to use it they would have to use the images to make a story board with reduced text which would take up a lot of time.

The satisfied participants identified illustrations and text as the reasons they were pleased. The participant who selected *Pete the Cat* acknowledged the large font and colourful illustrations, while the other made the similar comment that *One is a Snail, Ten is a Crab* was large and colourful. Others who had chosen this item thought it did not have enough text or was not interesting, demonstrating that individual beliefs and experiences impact a selection. Again this is a reminder that while we can use this research to make generalisations, it will not apply to every student.

These results were developed further when participants were presented with physical copies of the picture books and asked again to select an item.

The title appeared to be less important during this selection which is likely due to the participant's already knowing it and having some knowledge of the items. Instead illustrations were the first detail participants commented on, at times even disregarding a book immediately upon seeing the pages. *Jim and the Beanstalk* was set aside as many of the images were in black and white which one remarked was “too boring for children.” In contrast, *One is a Snail, Ten is a Crab* and *Pete the Cat* were noted for having large, colourful images which all participant's felt would make them engaging picture books for young children. Text was another valued feature as many noted the large font size used in *Mr. Archimedes' Bath* and one participant stating;

“This is really nice and short and big letters too so that's great is you are displaying the book, which is often what we do with a group you read to, you show the book and read it at the same time, or if the child is starting to read then they will be able to follow the story a lot more easily.”

It was noted that some items had left out important details on the style of text as many were drawn to *Pete the Cat* for its ‘fun’ font and use of numeric equations. This was a major drawcard for teachers, as one commented;

“It does have maths in it, like actual maths as in its showing you $4 - 1 = 3$ which is helpful especially when you're trying to teach.”

As the research discussed in the literature review from Goulding and colleagues (2014) pointed out, these textual features can be particularly useful in developing literacy and we can understand why early childhood teachers may wish to know them.

It was interesting that the participant who had determined that *One is a Snail, Ten in a Crab* only counted up to ten went on to select this item after discovering that the book actually counted all the way up to 100. They made the comment that this information was not in the “wee blurb” and that “this would have been helpful to know as I can see I would develop a few lessons out of this, you know basic counting and then counting in tens up to one hundred.” Similarly, the record for *Mr. Archimedes' Bath* was pushed aside with the comment that it didn't relate to math or seem visually appealing. However when presented with the item a number of participants spent time looking through the pages and recognised that this could be useful to teach the concept of displacement. Although this is not necessarily a maths-related topic, it reflects the research discussed in the literature review which argued that teacher's often select items that can be used for a variety of subjects and *Te Whāriki's* requirement that children learn mathematical theories in the classroom (New Zealand Ministry of Education, n.d.). One participant appeared to be thinking about how they could use the item for this purpose and commented “that's a tough idea for children so I would keep this book in mind.” While this item was not selected by any students it highlights how much detail had been left out of the record.

The Doorbell Rang had been dismissed due to its brief summary and apparent lack of mathematical content, however the physical item was given much more attention with one participant going as far as to change their selection from *Fifty-Five Feathers* to this item. This was based on the content of the illustrations as they explained how each page had more characters than the previous which would allow for a lesson on counting or language development in general. As they described;

“You can count with the children you know how many children are in the picture that's displayed you know what mum is doing, how many coats she has on her arm or you know how many cookies can you see on the table. So you can broaden what you're saying, what is being said in the story.”

Upon viewing the book, one participant commented that it “...is about sharing so something that I probably didn't realise from the description there.” Another exclaimed “oh I see the maths theme now,” before questioning why this wasn't included in the record. As they explained, “that blurb made it seem like this is a teamwork kind of book when there really is a lot of maths in this.”

The impact this has on a selection is observed in the number of participants who changed their selection to *Pete the Cat*, which was the first choice for only one individual. In addition to the illustrations and text, many pointed out that the book included a free song which had not been included anywhere in the record. Comments included;

“Why wouldn’t you include a free song? This really makes the book a winner if you are teaching.”

“It took me by surprise to be honest. I didn’t think it would be that good but it’s actually a lot better than I thought it would be.”

This part of the research indicated that there was a discrepancy between bibliographic records and the items they represent. Not only was this expressed by the participant’s themselves, but a majority of them changed their original selection when presented with physical picture books.

Concluding Interviews

To end the project, participants were asked a series of questions, beginning with what information they looked for when making a selection. All reiterated the importance of subject headings summary and illustrations and commented that these areas were often lacking in detail. Many gravitated towards items they could use for subjects others than maths, again aligning with the teachers interviewed by Blakeney-Williams and Daly (2013). Comments included;

“I found the picture on the front was good because a lot of these don’t really say what the book is about. The picture helped tell me things like if it was animals or people and if it was something children might like.”

“The summary is so important when you are teaching. I need to know what lessons I can use this for and how. Like some of these you can tell are about maths but I want to know specific details. You know, is it addition or subtraction or counting?”

“I use the subject headings a lot. They tell me what I can use the book for besides just reading a story.”

Participants were then presented with the list of metadata that could be included in a record and asked which they found helpful when making a selection. All acknowledged text, summary, subject headings and illustrations as important which supported what they had articulated when making the earlier selections. Other details identified were the need for character information as a way of determining children’s enjoyment and the way an item could be used for educational purposes. This was supported by the participant’s interest in the animal characters of *Mr. Archimedes’ Bath* and the number who selected *Fifty Five Feathers* from the records due to its inclusion of native New Zealand birds.

When asked what details were unimportant, participants identified several of the details on the provided list. They were uninterested in information on the date, place of publication and author, saying that there was little need for this.

Overall it was clear that participants were unable to get a good sense of what the book was about before opening it themselves.

Conclusion

This research revealed the metadata valued by early childhood teaching students and confirmed the hypothesis that there is a problem with the current UC catalogue. This was information that was previously unknown and can be used to further our understanding of this particular user group.

What metadata do early childhood teaching student’s value in a record?

It was clear that participants placed a high value on data in the bibliographic record relating to the subject, summary, illustrations and text. These details indicated if children would enjoy the story, which participants felt was essential when using a picture book to teach. As explained during the interviews, it was important to grab children visually and capture their interest in order to prevent them from getting bored and disengaging with a lesson, while large text meant that children would be able to follow along with the story. Participants described looking for books with colourful pictures and simple text, a point that is supported by the observations during the second part of the search. When looking at the bibliographic records, *Fifty-Five Feathers* and *One is a Snail, Two is a Crab* were the most popular items due to their colourful covers, while *Pete the Cat* was the overall favourite due to its large font and bright illustrations.

Many of the comments made by participants relate to the strands outlined in *Te Whāriki*, indicating that the metadata valued by this group directly relates to their role as early childhood teachers. The subject headings and summary were often looked at to determine how a book could be used to teach a lesson with participants setting aside the records which had little detail in these fields. This was evident with the record for *The Doorbell Rang* which had a short summary and only one subject heading resulting in most participants setting it aside. Upon viewing the item, many reconsidered its use for teaching different subject, while one individual mentioned using the numbers of characters and body parts to teach counting. Similarly, many favoured *Pete the Cat* due to its inclusion of a song and the use of numbers throughout the text, which reflects *Te Whāriki’s* encouragement to develop

maths through song and identifying numbers (New Zealand Ministry of Education, n.d.).

As all participants study in New Zealand, it is unsurprising that details on Te Reo versions of the story were valued. This was not mentioned during the interviews, but observed in the second part of the research as many were noted as being happy to discover *Fifty-Five Feathers* focused on native birds and that it was printed in Te Reo. Although the small text size led participants to change their minds, they maintained an interest in the item and described how it could be used for other teaching purposes.

This data showed that early childhood teaching students value metadata which relates to the enjoyment of the children they are reading to and their needs as teachers following a curriculum. Throughout the research, participants both described and were observed showing an interest in picture books which were engaging for children and covered different subjects. As many changed their selection to items which met these requirements, we can see how valuable it is for this user group to have as much detail as possible in these metadata fields.

To what extent are the University of Canterbury records currently meeting these requirements?

The second question can be answered when looking at the number of participants who were unsatisfied with the items they selected from the bibliographic records. Throughout the interviews and observations, many struggled to find sufficient information on the illustrations, text and subject of an item. This led to many participants using the cover image to determine this information though was not always effective, as was seen with the record for *Fifty-Five Feathers*. Although a majority of participants chose this item, they were ultimately disappointed by how text heavy it was and indicated that the record had not accurately represented the picture book.

The catalogue also failed to provide the level of detail required by participants because subject headings and summaries were often brief and did not meet their needs. This was evident when participants looked through the bibliographic records and commented that some items seemed like they couldn't be used to teach mathematics yet identified this possibility when presented with the physical items. Although they were able to make the connection between the book and a lesson by themselves, this approach relies on the individual taking the time to go through picture books, which many had already commented they had no time to do. This was seen with *Pete the Cat* because the record did not include notes on the book's inclusion of maths equations and a song, which was what made it appealing to so many during the final selection.

The lack of relevant metadata in the records has the potential to impact the time early childhood teaching students spend finding appropriate picture books. If a record fails to represent the item adequately, students are unlikely to notice it and will potentially miss out on finding the picture book best suited to their needs. This was observed with participants setting aside records which had little information in the subject headings and summary and focusing instead on those with more details. As all but two participants were unsatisfied with their initial choice, we can argue that these students would have missed out on finding the right picture book had this been a realistic selection. Not only does this mean they spend more time looking for items, but it indicates that the catalogues is failing to meet the requirements of this user group.

Future Research and Implications

While the University of Canterbury is beginning to understand their users' needs through this study, it is important to remember that these results are specific to this library's information systems. We cannot apply these results to other user groups, but do recommend that similar research is conducted into how other groups select picture books. It would be particularly interesting to look at how professional teachers working at both the early childhood and primary level select items to see if there are similarities with the students in this current research. Knowing the details that early childhood teaching students look for when selecting a picture book would inform cataloguers on what details to add to a record so that the selection process is more effective. Identifying this gap between what early childhood teaching students value and what the UC library catalogue provides can assist in creating more user-centric records and ultimately improve our service.

Summary

This research has revealed what metadata early childhood teaching students value in a picture book record and indicates that the UC library catalogue does not meet these requirements. In using a combination of data methods, I was able to answer the research questions by identifying and confirming common themes throughout both sets of data collected. Although this research was not conducted in a real-life situation, measures were taken to ensure accuracy and validity of results and it is felt that this research provides an accurate reflection of what early childhood teaching students value and the effectiveness of the UC catalogue. While the topic of cataloguing is not new, this research has made a contribution to literature on this topic by focusing on a previously examined user group and their experiences with a picture book catalogue.

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