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First-, Second-, and Third-Grade Children's Picture Preference of Caldecott Award Winners and Runners-Up 1972-1984 in Selected Schools

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FIRST-, SECOND-, AND THIRD-GRADE CHILDREN'S PICTURE PREFERENCE OF CALDECOTT AWARD WINNERS AND RUNNERS-UP 1972-1984 IN SELECTED SCHOOLS

by

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This study was conducted to determine if children would select the Caldecott Award Committee's Award Winner as their first preference. Consideration was given to the variables of grade, reading level, race, sex, and school system. Consideration was also given to style of illustration.

The subjects contributing to the study were 384 children if the first, second, and third grades of three South suburban school districts close to Chicago, Illinois. The children voted on their picture preferences of the Caldecott winners for the years 1972, 1978, 1980, 1982 and 1984.

Conclusions based on the results of the study were:

1. Children do not always select the Caldecott Award winners as their first choice.

2. There was a statistically significant relationship between grade and the books selected.

3.. There was a statistically significant relationship between reading level and the books selected.

4. There was not a statistically significant relationship between race and the books selected.

5. There was a statistically significant relationship between sex and the books selected.

6. There was a statistically significant relationship between school system and the books selected.

7. The year by year analyses indicated the following results.

a. Grade level was a significant factor in two of the seven years.

b. Reading level was a significant factor in three of the seven years.

c. Race was never a significant factor

d. Sex was a significant factor in five of the seven years.

e. School system was a significant factor in four of the seven years.

8. The children selected the most realistic pictures in six of the seven years.

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VITA

Joan K. Oksas was born in Chicago, Illinois on February 21, 1927. She graduated from parochial elementary and secondary schools in that city. She received a Bachelor of Science degree in Economics from Northwestern University in 1944 and a Master of Education degree in Library Science and Communications Media from Chicago State University in 1975. She also received a Master of Education degree in Instructional Technology from Northern Illinois University in 1981.

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Since 1975 she has been a faculty member at Chicago State University in its Department of Library Science and Communications Media.

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INTRODUCTION

John Burns Warthman, in his 1970 dissertation to determine if a selected group of school children agreed with the Newbery/Caldecott Awards committee's choices, recommends that his study be replicated in other sections of the country to "determine if regional differences exist among children in book selection."[1]

The following is the list of conclusions derived from his study.

1. Children do not generally select the Caldecott Award books for their first preference...
2. In the selection of picture books, the grade placement of the children does not tend to influence their selection.
3. The sex of the children does not tend to influence the selection of the Caldecott Award book and runners-up.
4. The difference of race does not seem to influence the selection of picture books.
5. On the basis of reading levels, the children tend not to be significantly different in the picture book selection.
6. The children are not significantly different in picture book selection on the basis of school system attended.[2]

Statement of the Problem

The purpose of this study was to determine, if, indeed, children surveyed in 1985 agree or disagree with

the Caldecott Medal Award Committee's choice of winners and runners-up. Consideration was given not only to those areas covered by the Warthman study; grade, reading level, race, sex and school system attended, but also style of illustration.

MacCann and Richard mentioned that members of the Caldecott Awards Committee need no art expertise and artists are not asked to participate as advisers. They suggested that these experts be requested to take part in the selection process. These authors insisted that the Caldecott prize should have meaning as an art prize, for visual content is a predominant feature of nearly all the books a child encounters...[3]

Questions to be Answered

This study seeks to answer the following basic questions.

1. Will statistically significant differences exist between the children's first place choices and the Caldecott Award Committee's first place choices?
2. Will there be a statistically significant difference in book selection on the basis of grade placement of the children?
3. Will a statistically significant difference exist in book selection on the basis of the reading levels of the children?

4. Will a statistically significant difference exist in book selection according to race?
5. Will there be a statistically significant difference in book selection made between students of opposite sex?
6. Will there be a statistically significant difference in book selection between the children in three schools?
7. Will a statistically significant difference exist in book selection based on style of illustration?

Delimitations of the Study

This investigation has been limited to students in grades one, two, and three in representative schools of three Chicago south suburban school systems. One system is composed of mostly white children, another half black children and the third has all white children. As in Warthman's study, the population sample is proportional to the total population according to grade, race and sex.[4]

The Caldecott Award winning books and runners-up for the years 1972, 1974, 1976, 1978, 1980, 1982, and 1984 were included in the study. These years yielded seven winners and eighteen runners-up. This compared with Warthman's study which included books from 1938 to 1970 and yielded seven winners and twenty-one runners-up.[5]

As in Warthman's study, two pictures have been selected from each book.[6]

Definitions of Terms

The following terms included in this study are those used according to widely accepted definitions.

Caldecott Medal.--An award given each year to the illustrator of a children's picture book. The artist must be a citizen or resident of the United States. Also called the "Caldecott Award".[7]

Honor Book.--Books considered for the Caldecott Award, receiving outstanding recognition, but not receiving sufficient points to earn the first place award.[8]

Runner-up.--Same as Honor Book.

Picture Book.--A book in which the text is brief, but the story line, theme or concept is imparted with illustrations.[9]

Picture Books for Children.--Those books for which children are a potential audience.[10]

Illustrations.--The amount of space given to a picture equals or exceeds the amount of space given to the text. A Representative Illustration is a picture in each book selected for the study, with little or no text.[11]

Children.--Ages up to and including fourteen.

Style of Illustration.--Defined by Barbara Myatt and Juliet Carter. The order of realism, from most (1) to least (6) was determined by a graphic artist of a publishing firm of children's books.

1. Photographic - full natural shading, line and color in pictorial reproduction of the object. (Van Allsburg - Jumanji)

2. Painterly - figure developed by undistinguished brush strokes of color, and dominance of tonal masses over line to define form.
(Feelings - Moja Means One)

3. Full Line Drawing - form and contour established by colors, interior and exterior masses, and shading.
(Dillon - Why Mosquitoes Buzz ...)

4. Simple Line Drawing - minimal outside lines, single color, and enough detail to render a pictorial representation of the object.
(Baylor - When Clay Sings)

5. Cartoon - humorous rendering of the figure with color and with emphasis on the subject rather than style of execution; includes personification.
(Domanska - If All the Seas Were One Sea)

6. Collage - figure created by application of textures - fabrics, paper, lace, or other materials applied to a background, in color.[12]
(Lionni - Alexander and the Wind-up Mouse)

There were no simple line drawings, black and white cartoons or collages in the sample years for this study.

Abbreviations commonly used in the library science field, and used in the study are:

N/C - Newbery/Caldecott

ALA - American Library Association

Significance of the Problem

Besty Hearne, children's book reviewer for Booklist as well as a judge for National Book Awards, rued the fact that so much emphasis is placed on the winners of the well known N/C medals, as there are numerous other good picture books published each year. Her bibliography in Choosing Books for Children ... listed twenty picture books of which only two were Caldecott Medal winners and two were Honor Books.[13]

A N/C member, Linda Silver, admitted to wrong books having been chosen for the awards, but reminded us that the awards spark an interest in books. Also, Ms. Silver added that members of the committee are not art critics. In addition to this failing, original illustrations may have been distorted during the publication process. Many people and processes are involved in book production. The committee judges may only see what has been printed. The book designer, the printer, and even the quality of paper can alter illustrations.[14] The resulting pictures may be different from the artist's original.

There is a completely different reason for the focus on children's views of illustrations. According to Kayde and Glaser, the Caldecott Award adds prestige to the publisher's lists. Publishers can and do try to influence the committee members by using various tactics, such as giving the members advance proofs, writing personal notes, and providing wining and dining.[15] Although there are no formal restraints placed on publishers on how to deal with the committee members, and the awards do not necessarily make the publisher or author an instant millionaire, much importance is placed on winning. However, profits increase noticeably because of increased popularity over a longer period of time, rights to paperbacks, and foreign sales. Figures for one year (1978) indicate that only 1 percent of the <u>total</u> children's book sales came from the N/C winners and Honor Books. Thus, according to Kayde and Glaser, the

publishers do not publish just for the library market, but are also paying attention to the needs and wants of parents, children, and professional educators.[16]

Patricia Cianciolo conceded that "we have to admit that no adult can select books from the child's point of view". Her criteria for selection are:

1. excellence in overall literary quality
2. excellence of execution in the artistic techniques employed
3. excellence of pictorial interpretation of story elements
4. excellence of representation for the intended audience - children.[17]

Her bibliography included approximately 740 recommended titles of picture books published between 1955 and 1980 for children ranging from 3 to 16 years old. Of that total, only two have won the Caldecott Medal, and twelve were Honor Books.[18]

An interesting change in the selection of Caldecott Award committee members was mentioned by Bette Peltola. Beginning in 1981, Caldecott winners were to be selected by their own committee. Previously, the N/C winners were chosen by a single group. Each of the 15 members of the now separate committee reads as many eligible books as possible, and then nominates several for the award. Times are scheduled for committee meetings as the Midwinter Meeting of the ALA, but frequently more time is required. The first item discussed is the order in which the books are reviewed and when to move to a vote. A point system is used for selection. A winner must have at least eight

first place points and a large enough spread between it and the next ranking book to indicate that it is truly a winner. There is no set number of Honor Books, and they are announced in alphabetical order, by author.[19]

Peltola also adds the terms, definitions, and criteria for the awards:

Terms

1. The Medal shall be awarded annually to the artist of the most distinguished picture book for the children published in the United States during the preceding year. The illustrations must be original.
2. The award is restricted to artists who are citizens or residents of the United States.
3. The committee in its deliberations is to consider only the books eligible for the Award, as specified in the terms.

Definitions

1. A "picture book for children" as distinguished from other books with illustrations, is one that essentially provides the child with a visual experience. A picture book has a collective unity of storyline, theme, or concept developed through the series of pictures of which the books is comprised.
2. A "picture book for children" is one for which children are a potential audience. The book displays respect for children's understandings, abilities, and appreciations. "Children" are defined as persons up to and including fourteen, and picture books for this entire age range are to be considered.
3. "Distinguished" is defined as:
   - marked be eminence and distinction
   - marked by excellence in quality
   - marked by conspicuous excellence or eminence
   - individually distinct
4. The "artist" is the illustrator or coillustrator.
5. "Original work" means that the illustrations reprinted or compiled from other sources are not eligible.
6. "American picture book published in the United States" specifies that books originally published in other countries are not eligible.
7. "Published ... in the preceding" year means that the book has a publication date in that year, was available for purchase in that year, and has a copyright date no later than that year.

8. "Resident" specifies that the artist has established and maintained residence in the United States as distinct from being a casual or occasional visitor.
9. The term "only the books eligible for the Award" specifies that the committee is not to consider the entire body of the work by an artist or whether the artist has previously won an Award.

Criteria

1. In identifying a distinguished book for children:
   a. Committee members need to consider:
      excellence of execution in the artistic technique employed
      excellence of pictorial interpretation of story, theme, or concept; of delineation of plot, theme, characters, setting, mood, or information through pictures
   b. Committee members must consider excellence of presentation in recognition of a child audience.
2. The only limitation to graphic form is that the form must be one which may be used in a picture book (e.g. motion-picture photography is not at present possible, although still photography is).
3. Each book is to be considered as a picture book. The committee is to make its decision primarily on the illustrations but other components of a book are to be considered especially when they make a book less effective as a children's picture book. Such other components might include the written text, the overall design of the book, etc.
   NOTE: The committee should keep in mind that the Award is not for didactic intent or for popularity.[20]

Joan Nist joined others in claiming that adults who select children's books for awards should find out what kinds of books children select. She used Baum, Potter, and Geisel as examples of authors whose works are still best sellers. A Newbery runner-up, Charlotte's Web, is still not only read by children, but has also been produced in film and received the Laura Ingalls Wilder Award.[21]

Selma Lanes criticized the ALA for awarding the Caldecott Medal to Gerald McDermott for his Arrow to the Sun: A Pueblo Indian Tale. She contended that the artist's

style has little grace or motion. Although his colors vibrate, they are too abstract. So why did this picture book win an award? Perhaps it was the time of the Indian. Lanes suggests that if this had been the case, John Biehort's Song of the Chippewa would have been a better choice.[22]

Hearne and Hanley state that:

> ... the fact is that most fourth to seventh graders don't read as well or as much today as their counterparts did in past decades. They are, however, exposed to more visual media than ever before in the form of films, television, video games, computer graphics, and advertising art. The picture book is the perfect bridge between print and graphics for these children...[23]

To add to the confusion of selecting Caldecott Medal winners is simply the term "picture book". Zena Sutherland stresses the point that a true picture book is one with little or no text. A picture story book is one with a structured plot. Both kinds of books have won the Caldecott medal. Winners range from the textless ABC books to concept books (how big - how high - how strong) and to simple plots.[24]

Summary

Because of the statements made by many of those involved with children's literature concerning the questionable criteria for the selection of the Caldecott Award winners, it is felt that this study is relevant. It may again indicate that those for whom the books are intended - the children - do not agree with the conclusions

drawn by adult judges. However, it is hoped that because of the change in the composition of the committee and criticisms of the committee's selections (albeit few are published), this study will indicate that the children for whom the books are chosen will agree with the Caldecott Committee's selections.

Warthman's study was conducted with fourth-, fifth-, and sixth-grade students. The present study is concerned with first-, second-, and third-graders. Most Caldecott winners are housed with "Easy" books in both public and school libraries, and, consequently, are selected by these lower grade level children, even though picture books are said to be appropriate for children up through age fourteen. It is felt by the researcher that using these groups of children will contribute to the credibility of children's picture preference of Caldecott Award winners.

As one involved in the education of media specialists (formerly identified as teacher-librarians) the researcher is concerned with the acceptance of the award winners by the students. The media specialist plays a part in curriculum development in the schools as one who is able to select support materials.[25] However, the specialist must depend upon others, such as those giving awards and book reviewers, to select some of these materials.

In a time such as this, a period of reduced media center budgets, many specialists can afford only winners, not runners-up. For example, the ALA and the Illinois

Library Association suggest that one percent of total per pupil cost be allocated to the media centers. Of this amount, not only books (including expensive reference materials) are purchased, but also periodicals and software such as filmstrips, slides, computer programs, and supplies to develop locally produced materials.[26] Very few elementary school teachers are faced with this kind of management problem.

As of the latest report from the Illinois State Board of Education, the average cost per pupil in public elementary schools in the State is $2,994.25,[27] and the average per pupil amount allocated to media centers in Illinois is $14.00.[28] This last figure is for all items listed above plus hardware, repairs, etc. - less than half the suggested allocation of $29.94.

Thus, the researcher feels that a Caldecott Award given to an artist for a book children enjoy will give the media specialists confidence in the selection of those titles. In addition, since the specialists are accountable for the development and production of materials for both in and out of class use, the style of illustrations selected by the children can be utilized in the selection of locally produced materials and the selection of commercially produced materials.

ENDNOTES

CHAPTER I

[1]J. B. Warthman, "A Study of Picture Preferences of Caldecott Award Winners and Runners-up by Fourth-, Fifth-, and Sixth-Grade Children of Selected Schools" (Ed.D dissertation, University of Southern Mississippi, 1970), p. 76.

[2]Ibid., pp. 75-76.

[3]Donnarae MacCann and Olga Richard, The Child's First Books: A Critical Study of Pictures and Texts (New York: The H. W. Wilson Company, 1973), p. 115.

[4]Warthman, "A Study of Picture Preferences...", p. 18.

[5]Ibid., pp. 20-21.

[6]Ibid., p. 19.

[7]Bette J. Peltola, "Choosing the Newbery and Caldecott Medal Winners," Top of the News 36 (Fall 1979): 43.

[8]Ibid.

[9]MacCann and Richard, The Child's First Books, p. 2.

[10]Bette J. Peltola, "Newbery and Caldecott Medals: Authorization and Terms," Top of the News 36 (Fall 1979): 49.

[11]Warthman, "A Study of Picture Preferences," p. 6.

[12]Barbara Myatt and Juliet Mason Carter, "Picture Preferences of Children and Young Adults," Educational Communication and Technology Journal 27 (Spring 1979): 47.

[13]Betsy Hearne, Choosing Books for Children: A Common Sense Guide, (New York: Delacorte, 1981), pp. 29-42.

[14]Linda R. Silver, "One book to Win: The Continuing Story of the Newbery-Caldecott Awards," Top of the News 36 (Fall 1979): 31-34.

[15]Mimi Kayde and Suzanna M. Glaser, "For Whom the Calls Toll: The Newbery-Caldecott Awards from the Publishers Viewpoint," Top of the News 36 (Fall 1979): 36

[16]Ibid., pp. 40-42.

[17]Patricia Jean Cianciolo, Picture Books for Children, Chicago: American Library Association, 1981), p. 5.

[18]Ibid., pp. 45, 78, 101, 102, 132, 213.

[19]Peltola, "Newbery ..." pp. 49.

[20]Ibid., pp. 50-53.

[21]Joan Stickan Nist, Popularity in Wonderland (Ann Arbor: University Microfilms International, ED 150 636, 1977) pp. 1, 4.

[22]Selma G. Lanes, "Up for Discussion. Sign of the Times: Caldecott Winner of 1975," School Library Journal 22 (November 1975): 28.

[23]Besty Hearne and Karen Stang Hanley, "Picture Books for Older Children," Booklist 79 (June 1, 1983): 1280.

[24]Zena Sutherland, Children and Books, (Glenview, Ill.: Scott Forseman, 1981) p. 79.

[25]Nevada Wallis Thomason, ed., The Library Media Specialist in Curriculum Development, (Metuchen, N.J.: Scarecrow, 1981), pp. 48-49.

[26]American Association of School Librarians and Association for Educational Communications and Technology, Media Programs: District and School (Chicago: American Library Association, 1975), pp. 40-41.

[27]Interview with Dave Wilder, Public Statistician, Springfield, Illinois, 17, September 1985.

[28]Herbert Goldhor and Cora E. Thomassen, The 1981 Survey of Illinois Public School Media Centers, (Springfield, Ill.: 1983) p. 6.

CHAPTER II

LITERATURE SURVEY

This chapter traces various studies and surveys which indicate picture preferences of children, uses of picture books as teaching/learning tools, and the evaluative criteria adults use to select picture books for children.

The selection has been compiled from computer searches of the following data bases between the years 1970 and 1984: ERIC, Magazine Index, Information Science Abstracts, and Dissertation Abstracts International. The card catalog at Chicago State University was also examined for monographs published during the same period.

Studies Indicating Children's Picture Preference

According to Abrahamson and Shannon, young readers enjoy stories in which problems are solved, contrasting characters and episodic plots. Their survey sampled 10,000 children in kindergarten through the eighth grade. The most favored books were those with non-human characters, although books featuring young children with realistic drawings were also popular. Tomie de Paola, whose art work

was selected favorably by children in previous studies, had three books on the 1982 list.[1] He has never won the Caldecott medal but was runner-up in 1976 for his folk tale, Strega Nona.

Farleigh, Evard and McDaniel conducted a study with students in grades four, five, and six. Frequently named topics were tallied from a questionnaire. Pictures representing the categories were paired with them. Students then indicated picture preferences. It was determined that there is a pronounced difference between boys and girls in reading interests. Girls preferred animals and fairy tales, while boys preferred sports, cars and racing. However, both selected humor as a popular theme. After the study, library interviews were conducted which revealed a corresponding preference in book selection. Thus, pictures seem to provide a viable measure for book selection at these grades.[2]

In a study on artistic style as well as content, Hummel found that children prefer the true representation type picture rather than the abstract. However, during the period 1971-1976, the number of books published with abstract pictures increased. The first and third grade students in the study all liked animal stories, but boys indicated a preference for monsters, space and science. Girls, on the other hand, preferred mysteries and fairy tales.[3]

Laden and Grascara indicate that adults select books for children and, consequently, choose those with illustrations which appeal to them, even though studies indicate adults and children have different preferences. Canadian and Argentine children were used in this test which concluded that:

1. the preference of soft edges increases in popularity as the Canadian children grew older, while the opposite was found with the Argentine children.
2. the preference for natural forms decreased from ages seven through nine for Canadian girls but decreased in the Argentine girls from ages seven through eleven.
3. Argentine boys were the only ones who indicated a lack of preference for complex pictures at the older age level.[4]

A study by Myatt and Carter to determine preferences of picture style was conducted with children in grades K, 1, 2, 3, 5, 9, and 11. The authors' results support earlier studies indicating that photographs, then realistic drawings are favored by most children. For example, first grade boys prefer photographs, while girls prefer simple line drawings. The authors suggest that both kinds of pictures be used.[5]

Five dependent variables were used by Stewig to determine picture preference among children - color, shape, proportion, detail and space. One variable was manipulated at a time, while the others remained constant. The independent variables were grade level, sex, social class, and race. It was found that older children prefer realistic pictures with fewer details. There was no

significant difference apparent in the proportion and shape choices at any age. Upper class children selected pictures with few details and flat pictures more often than the middle class. White children preferred realistic color and flat picture planes while the black subjects selected few detail and shallow space pictures.[6]

Nursery school children were interviewed in 1983 to determine their preference for particular colors and artistic styles. Townsend assumes that children will pay attention more readily if the pictures appeal to them. The results of the survey indicate that the majority of the children preferred primary colors over pastels. The two year olds preferred photographs, but the three year olds preferred cartoons.[7]

Picture Books as Teaching/Learning Tools

Twenty Caldecott Medal winners and Honor winners were selected for a study by Gambrell and Sokolski because of their illustrations, and also because they are generally available. The authors felt that pictures should stimulate language development and, using the Menzo-Legenza 10 picture Potency Formula, found that ten of the randomly selected Caldecotts scored high, nine scored medium and only one (Once Upon a Mouse) scored low. They suggested that picture books be used to their greatest potential by teachers in developmental language learning.[8]

Peng and Levin's study was conducted to determine if pictures aid in long term memory among second grade

students. The study was unusual in that one of the variables was a three day interval which elapsed between treatment and test. Colored pictures were shown relevant to the taped story heard by the children in the experimental group. The control group read along with the tape. Although the picture group scored better on the test, a comment was added stating that a listen-only group should have been included. The experiment was significant since it provided evidence that pictures do act as an aid to children's prose comprehension.[9]

In a study of first, second and third graders, results reported by Ramsey showed that type of picture style along with text, content and grade level, all affected picture preferences. Consequently, illustrative style should complement the type of text. It was also concluded that children prefer the photograph and realistic cartoon, which indicates that realism is favored. Children in all three grades were consistent in selecting books with pictures of the "real" thing. The survey found that the older the child, the more pronounced the preference.[10]

The feminist movement has played a dominant part in changing sex stereotypes for girls and women. However, Ray found that males, too, are being stereotyped. In the Caldecott Award winning books, males are found to be competent, rational and assertive. In addition, when the text indicates that the characters are sad, only the females are sad. Male expressions very seldom show any kind of emo-

tion. The author suggested that librarians should be aware that this problem exists, should examine books for sex bias, and try to give children a "balanced diet". Little boys deserve to know that they can do and be anything, the same as little girls.[11]

Roberts also concluded that some of the Caldecott Medal winners are not free of sex stereotyping. Users of the books should be aware of this factor, as some children's attitudes may be influenced by it. She also mentioned that, although written primarily for children in the two to seven year age groups, the Caldecott winners are read by those in older age groups.[12]

A third example of stereotyping was reported by Schubert. She listed seven categories of sex stereotyping in the Caldecott winners: 1) achievers are good looking, 2) norms are established which limit the aspirations and self concept of females, 3) males perform brave and important deeds, 4) females show strong emotion most frequently, 5) females have domestic roles, 6) males sit idly while females perform domestic chores, and 7) only males are depicted in a variety of occupations. The author then suggests three options to overcome these failings: 1) censor offending books, 2) discuss or explain the stereotyping, and 3) search for counter-examples, such as biographies.[13]

Travers and Alvarado contended that there are problems concerning children's responses to different kinds of pictures. Illustrations and words, stimuli which are

termed "surrogates" because they are "produced by one person and arose perception in another" may arouse different results due to the clarity of the producer. Very clear illustrations are considered to be "high fidelity".

Most still pictures are actually not intended to show a still scene. In many cases, the teacher must translate it to an action-filled scene. However, three methods are used by artists to convey movement; blurred images, falling objects in mid-air or teetering on an edge, and the use of signs indicating motion, such as a figure in a running position.

The authors indicated that, in order to receive the information given by a picture, the person must have the orienting response and the attending response. Children very often return to the same picture books frequently, because old information has not been retained and new information is desired.

The research mentioned indicated that simple high-fidelity pictures be used for young students and may be more complex for older children. Appropriate illustrations should be used in educational materials when it is difficult to put that information into words.[14]

In a study by Wicklund and Katz using picture scans, it was determined that children in the fourth grade responded almost identically as adults. Since it was obvious that the pictures were not being named as they were flashed by, visual encoding was not taking place. The results of

the study indicate that pictures definitely play a part in remembering.[15]

Evaluation Criteria

Kingman aided the reviewer with a description of art styles and formats of the Caldecott winners. Although his volume's primary purpose is the collection of acceptance speeches of each winner from 1966 to 1975, his definitions provide a basis for comparisons of the styles of various artists.[16]

Donna Norton divided a chapter of her book into two parts: pure picture books - those with little or no text and picture books with text. Her chapter stands apart from similar texts in that she is involved with the children's cognitive development and aesthetic development. She suggests activities which can be utilized by teachers, librarians, and other adults to increase children's interaction with books.[17]

Librarians, teachers, and parents very often depend upon published reviews to make their selections of picture books. Charlotte Huck declared that "Both the text and the pictures need to be appraised."[18] Stewig investigated four reviewing tools and conducted a word tally of picture books. He found that the reviewers gave little note of the pictures and considers this to be "both an omission in reviewers' responsibilities and a disservice to readers." Since it accepted that most librarians and teachers do not have extensive art backgrounds, he feels that the reviewers

must comment on the books' visual qualities to service those who purchase and read them.[19]

A study conducted by Sword was designed to determine what books kindergarten teachers selected for their students for use in story periods, how they selected them and also the quality of the books. The teachers used criteria such as suitable content and illustrations for selection. They also relied upon personal knowledge, librarians, and children in selecting books for the story period. Although many were familiar with published book selection aids, less than half used them. Sword used an approved set of criteria to judge their selections and found that 23 percent of the books were rated high, 60 percent medium, and 17 percent low.[20]

Summary

The researcher has attempted to report three kinds of research concerning picture books. The first, that of the children's picture preference, indicates that children select books not only based on pictures, but also content.

The second portion, that of using picture books as teaching/learning tools, resulted in the consensus that pictures aided in the learning process, but that care must be taken in the selection of picture books so that stereotyping may be avoided.

The evaluation criteria used by most of those purchasing and using books, teachers, librarians and parents is that of published reviews.

In the studies previously cited, the following references have been made concerning picture styles favored by children who select picture books.

Style	Author
True representation	Hummel Myatt and Carter Stewig Tavers and Alvarado Abrahamson and Shannon
Photographs	Myatt and Carter Townsend Ramsey
Simple line	Myatt and Carter Stewig
Cartoon	Townsend Ramsey

ENDNOTES

CHAPTER II

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[17]Donna Norton, Through the Eyes of a Child (Columbus, Ohio: Merrill, 1983) p. 80.

[18]Charlotte S. Huck, Children's Literature in the Elementary School, 3rd Ed., updated. (New York: Holt, Rinehart and Winston, 1979) p. 110.

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CHAPTER III

METHODOLOGY

The research design of this study is a descriptive and analytic survey, the data being collected by ballots. This chapter indicates the criteria, procedures, and reasons for the selection of the subjects. It also explains the construction and administration of the ballots and describes the methods of tabulating and analyzing the data.

The Population

Books

The books selected for this study are Caldecott winners and runners-up, starting with 1972 and including alternate years through 1984. These years include seven winners and eighteen runners-up. (Appendix A)

Pilot Study

A pilot study was conducted in grades four, five and six at a private school on the south side of Chicago to experiment with ballots and the entire process. It was found that the ballots would not be numbered, as in Warthman's study.[1] The students indicated that they thought the

numbering sequence implied the "right" choice. Thus, the ballots used in the study used single letters for the first ballot and double letters for the second ballot. The students did not feel that the letters indicated any prescribed order. (Appendix B)

After the pilot study was completed, the researcher's committee suggested that, instead of surveying grades four, five, and six, the study would have more bearing on children's perceptions of picture books if the students in the first, second and third grades were surveyed.

Students

Three Chicago suburban public schools were selected from three different school districts. After an introductory telephone call, letters explaining the survey were mailed to the principals and/or superintendents. (Appendix C) Permission was granted in all three cases to survey the above mentioned representative schools in each of the districts. The grades included in the survey were the first, second and third.

Warthman's study used a sample size of 20 percent at each grade level.[2] This research used a larger percentage because of a larger sample size. At this age level, it was determined by the teachers that if a random sample of the classroom were taken, those not selected would feel "left out". The percentages are described below.

There were 182 students attending the three grades in School A out of a total of 709 in those grades, 148 from School B out of a total of 441, and 111 students from School C out of a total of 446. This resulted in a total population of 441 for the study.

Before the students participated, a consent form was given to the parents. (Appendix D) If no response was received, it was assumed that the child was permitted to take part in the study.

When surveyed, a total of 384 students participated. The difference between that figure and 441 was the result of students being absent, not having permission to take part, or transfer students who had not participated in a reading test.

The total of 384 students was composed of: 163 from School A or 23 percent, 121 from School B or 27 percent, and 100 from School C or 22 percent.

Each school is racially representative of the schools in the district. School A had, in the surveyed three grades, 25 black boys, 55 white boys, and five boys in other races. The representative grades had eleven black girls, 64 white girls, and 3 of other races. School B had 27 black boys and 23 white boys, 33 black girls, and 38 white girls. The third school is in an all white district. There were 48 boys and 52 girls surveyed. (Table 1)

TABLE 1

THE SAMPLE SCHOOLS CATEGORIZED BY SCHOOL SYSTEM, GRADE, SEX, AND RACE

SCHOOL A

Grade	1st		2nd		3rd		Sub-total		Total Students
Sex	B	G	B	G	B	G	B	G	
White	22	9	13	31	20	24	55	64	119
Black	9	3	8	2	8	6	25	11	36
Other	0	0	3	2	2	1	5	3	8
Total	31	12	24	35	30	31	85	78	163

SCHOOL B

Grade	1st		2nd		3rd		Sub-total		Total Students
Sex	B	G	B	G	B	G	B	G	
White	6	16	8	10	9	12	23	38	61
Black	12	10	6	9	9	14	27	33	60
Total	18	26	14	19	18	26	50	71	121

SCHOOL C

Grade	1st		2nd		3rd		Sub-total		Total Students
Sex	B	G	B	G	B	G	B	G	
White	10	14	26	16	12	22	48	52	100

N = 384

Reading Level Scores

The children in School A were given the Stanford Achievement Test in March 1985, those in School B were given the Iowa Basic in October 1984, and the students in School C were given the California test in April 1985. These original scores were transformed to a new distribution by calculating the z-scores so that reading levels of all the participants could be equated. Students with a z-score of over +1 were rated "high" and those with a z-score of less than -1 were rated "low". Those between +1 and -1 were rated "average". School A had 16 students falling in the "low" category, 127 in "average" and 21 rated "high". School B had 25 students in the "low" category, 76 in "average" and 20 in "high". School C had 13 students in the "low" category, 70 in "average" and 17 in "high".

Selection of Illustrations

1. Each of the seven groups of winners were placed in alphabetical order according to title.

2. Each book was placed on its spine and opened randomly. Any pictures on these two pages were not used.

3. The left page of the above mentioned page was turned to the right to open the book to new pages. The picture on the left hand side of those two pages was considered a representative illustration and was to be designated as such with a letter of the alphabet A to Z.

4. A second illustration was selected by turning the right hand page to the left and selecting the picture on the right side of the new pages as the representative illustration. This was identified by a double letter of the alphabet, AA to ZZ. (Appendix E)

5. If an illustration from items 3 or 4 above happened to cover two pages (a double spread), it was designated as the representative illustration in its entirety.

6. If a page selected in items 3 or 4 has less space given to the picture than the text, another page was turned until the criteria were met.

The list of Caldecott winners (W) and runners-up used in this study follows. The letters and double letters identify the two selected illustrations.

The numbers preceding the titles represent the following colored and black and white artistic styles in order of realism, from most (1) to least (7). The styles were determined by an artist, who is employed in the field by a publishing firm concerned with children's picture books.

(1) Photographic - colored

(2) Painterly - colored

(3) Full line - colored

(4) Cartoon - colored

(5) Photographic - black and white

(6) Painterly - black and white

(7) Full line - black and white

1972			
(7)	Hildilid's Night	A	AA
(4)	If All the Seas Were One Sea	B	BB
(6)	Moja Means One	C	CC
(2)	One Fine Day (W)	D	DD
1974			
(7)	Cathedral: The Story of Its Construction	F	FF
(4)	Duffy and the Devil (W)	G	GG
(3)	Three Jovial Huntsmen	H	HH
1976			
(3)	Desert Is Theirs	I	II
(3)	Strega Nona	J	JJ
(3)	Why Mosquitoes Buzz in People's Ears (W)	K	KK
1978			
(7)	Castle	L	LL
(3)	It Could Always Be Worse	M	MM
(3)	Noah's Ark (W)	N	NN
1980			
(7)	Ben's Trumpet	O	OO
(7)	The Garden of Abdul Gasazi	P	PP
(3)	Ox-Cart Man (W)	Q	QQ
(3)	The Treasure	R	RR
1982			
(7)	Where the Buffaloes Begin	S	SS
(5)	Jumanji (W)	T	TT
(3)	On Market Street	U	UU
(1)	Outside Over There	V	VV
(4)	A Visit to William Blake's Inn	W	WW
1984			
(4)	Glorious Flight (W)	X	XX
(3)	Little Red Riding Hood	Y	YY
(2)	Ten, Nine, Eight	Z	ZZ

In this study, there were no illustrations in the following categories:

Simple line - black and white

Simple line - colored

Cartoon - black and white

Collage

Book Selection Process

In order to preserve the anonymity of the participants, the classroom teacher assigned an identifying number to each student's ballot, the last two digits of which indicated reading level. For example, 123546 identified a student in School A, second grade, student No. 35, who has a reading score of 4.6. The form also included sex and race. (Appendix E)

In order to maintain objectivity in the study, as in the Warthman study, the classroom teachers in the study were given a half hour in-service overview of the study and were asked to give the following instructions to the students:

1. Go to the display table indicated at the top of your ballot.
2. At each table you will see a set of books, each opened to an illustration identified by a letter.
3. By looking at each set of illustrations, decide which book you would like to read first. On the ballot, put the number "one" in the space next to the corresponding letter. Decide which book you would like to read next and put the number "two" next to the corresponding letter on your ballot. Put the number "three" next to your next choice, etc. There is no correct or incorrect answer. Be sure to mark books that correspond with the year on your ballot.
4. Do not turn to any other illustrations in the book. Make your choices by looking at the illustrations that you see in each group.
5. Only one person at a set of books at a time.
6. Do not discuss your choices with your classmates.
7. When you have completed marking your ballot for the seven sets of books, please go to the area where you have been told and wait quietly.[3]

The researcher also trained a helper to conduct the surveys to reduce the possibility of bias. The helper volunteers as a teacher aide in an elementary school and is accustomed to working with children in the participating age

groups that were used in this study. The researcher, however, was present at the balloting.

The books were displayed in areas of the schools which were not used for any other purpose at voting time. The books were arranged on numbered tables in that survey area in sequential order, according to year of award.

Two ballots were prepared for each child, one with the identifying number, sex, and race; and the other with just the number. The first ballot was printed on white paper and the second on yellow paper. This method simplified the handling of the ballots during the survey as well as counting them later on. The beginning table number was indicated on that ballot, also.

Seven children entered the display area at one time with the first ballot. Each went to the table indicated on the ballot. When all children had completed voting on their first set of books, they were instructed to move, in clockwise fashion, to the next table.

After all seven tables were completed, the children handed in their first ballots and were given the second ballot. They then repeated the procedure.

Statistical Analysis of the Data

Comparative analysis was made of the Caldecott committee's selection of medal winners and the children's selection. As in Warthman's study, a t-test was used to compare the difference observed between the Caldecott Committee's choice and the children's selection. Four meth-

ods of counting votes were used: one, just the first vote; two, just the second vote; three, the average of the two votes and, as in Warthman's study, the fourth method used only the votes where the first and second were the same by the same child. By using the coefficient of correlation, it was found that using only the first vote showed a correlation of 0.068, only the second vote showed 0.065, the average of the first and second showed 0.066, and the "same" votes showed 0.035. Thus it was determined that the last method showed the most strength. A book which received a first place vote on the first ballot and a first place vote on the second ballot received a score of 11. A book receiving two second place votes scored twenty-two and those receiving two third place votes scored thirty-three. The mean scores for each book was calculated, also the standard deviation, the difference, if any, between the means of the Committee's first choice and the children's first choice. The t value was calculated to respond to the question presented by the researcher.

The hypothesis for part one was:

1. There is no significant difference between the Caldecott Award Committee's Award Winner and the children's first choice for each of the seven years of the study.

An hypothesis will be accepted or rejected at the .10 level.

The second part of the study concerned the correlation of the independent variables of grade, sex, race, reading level, and school system and the dependent variables of

artistic styles in the books for each of the seven years. The technique used was the Canonical Correlation (SPSS - CANCOR). It should be noted that in a canonical correlation analysis, the independent and dependent variables have no special purpose except to serve as an indication of the theoretical set.

The analysis was used to indicate relationships between the two sets of data, both of which contained several independent and dependent variables. It was used to calculate the maximum correlation between those sets of data.

The hypotheses for part two were:

2. There is no significant relationship between the variables of grade, reading level, race, sex and school system on book selection in the study.

3. There is no significant relationship between grade placement of the children and book selection.

4. There is no significant relationship between reading level of the children and book selection.

5. There is no significant relationship between race of the children and book selection.

6. There is no significant relationship between sex of the children and book selection.

7. There is no significant relationship between school system attended by the children and book selection.

8. There is no significant correlation between grade and the illustrative style of the children's first choices.

9. There is no significant correlation between reading level and the illustrative style of the children's first choices.

10. There is no significant correlation between race of the children and the illustrative style of the children's first choices.

11. There is no significant correlation between sex of the children and the illustrative style of the children's first choices.

12. There is no significant correlation between the school system attended by the children and the illustrative style of the children's first choices.

An hypothesis will be accepted or rejected at the .10 level.

For the sake of brevity, the titles of the books used in the remainder of the study will be abbreviated. The following is the list of abbreviated titles.

Year	Title	Abbreviation
1972	Hildilid's Night	Hildilid
	If All the Seas Were One Sea	Seas
	Moja Means One	Moja
	One Fine Day	Day
1974	Cathedral: The Story of Its Construction	Cathedral
	Duffy and the Devil	Duffy
	Three Jovial Huntsmen	Huntsmen
1976	Desert Is Theirs	Desert
	Strega Nona	Nona
	Why Mosquitoes Buzz in People's Ears	Mosquitoes
1978	Castle	Castle
	It Could Always Be Worse	Worse
	Noah's Ark	Noah
1980	Ben's Trumpet	Ben
	The Garden of Abdul Gasazi	Abdul
	Ox-Cart Man	Ox-Cart
	The Treasure	Treasure

1982	Where the Buffaloes Begin	Buffaloes
	Jumanji	Jumanji
	To Think I Saw It On Market Street	Market
	Outside Over There	Outside
	A Visit to William Blake's Inn	Blake
1984	Glorious Flight	Flight
	Little Red Riding Hood	Red
	Ten, Nine, Eight	Ten

Summary

This chapter contained demographic information on the students participating in the survey, the selection of illustrations, and the process used in the balloting. An explanation of the statistical analysis of the data was also included.

ENDNOTES

CHAPTER III

[1]J. B. Warthman, "A Study of Picture Preference of Caldecott Award Winners and Runners-up by Fourth-, Fifth-, and Sixth-grade Children of Selected Schools". (Ed.D. dissertation, University of Southern Mississippi, 1970), p. 22.

[2]Ibid., p. 18.

[3]Ibid., pp. 23-24.

Chapter IV

RESULTS OF THE STUDY

The study was conducted to determine if children select the Caldecott award winner as their first choice in each of the selected seven years. It also was used to determine what picture style was preferred by the children.

This chapter contains the results of the study in two parts. Part one analyzed the votes of the children who took part in the study as to their preferences compared with the first place selections of the Caldecott Award Committees. The second part of the study analyzed the results of the canonical correlation between the children's grade, reading level, race, sex, and school system attended and the selection of their first place choices. It will also be used to analyze the relationship between these variables and picture styles of the Caldecott Medal and Honor Books for the sample years.

Part One

Comparative analysis was made of the Caldecott Committee's selection of medal winners and the children's selection. A t-test was used to compare the difference observed between the two selections.

There is an inverse relationship between the scores. A book receiving first place votes was given a score of eleven. Those receiving second place votes were given a score of twenty-two, and so forth.

The results of this portion of the study are shown in Tables 2 through 8. The titles are listed in the same order as on the ballots. The Committee's first place selection is indicated with (*), and the children's first place selection is indicated with (**).

The results of the selections for the year 1972 are shown in Table 2.

TABLE 2

A COMPARISON OF THE CALDECOTT COMMITTEE'S AND THE CHILDREN'S SELECTIONS OF THE AWARD BOOK AND RUNNERS-UP FOR 1972

N=384

Title	Mean	SD	Caldecott Award Winner	First Choice of Children	t	Level of Significance
Hildilid	34.35	11.75			0	0
Seas	23.70	12.86				
Moja	28.66	12.42				
Day	20.72	18.75	*	**		

Both the children and the Committee selected Day as their first choice. Since there was no difference between the selections, a t value could not be computed. Null hypothesis number 1 is accepted.

The results of the selections for the 1974 books are

shown in Table 3.

TABLE 3

A COMPARISON OF THE CALDECOTT COMMITTEE'S AND THE CHILDREN'S SELECTIONS OF THE AWARD BOOK AND RUNNERS-UP FOR 1974

N=384

Title	Mean	SD	Caldecott Award Winner	First Choice of Children	t	Level of Significance
Cathedral	26.85	9.05			4.95	0.001
Duffy	21.25	8.82	*			
Huntsmen	20.21	5.22		**		

The children selected Huntsmen as their first choice, while the Committee selected Duffy, which was the children's second choice. The t value of 4.95 is greater than the table value of 3.29 at the .001 level of significance. Null hypothesis number 1 was rejected.

Table 4 shows the results for the 1976 selections of the two groups.

TABLE 4

A COMPARISON OF THE CALDECOTT COMMITTEE'S AND THE CHILDREN'S SELECTIONS OF THE AWARD BOOK AND RUNNERS-UP FOR 1976

N=384

Title	Mean	SD	Caldecott Award Winner	First Choice of Children	t	Level of Significance
Desert	24.53	8.09			7.78	0.001
Nona	16.00	8.09		**		
Mosquitoes	25.34	8.5	*			

For the 1976 selections, the children chose Strega Nona as their first choice, but the Committee selected Mosquitoes. This was the children's last choice. The t value of 7.78 is greater than the table value of 3.29 as the .001 level of significance. Null hypothesis number 1 was rejected.

The selections for 1978 are shown in Table 5.

TABLE 5

A COMPARISON OF THE CALDECOTT COMMITTEE'S AND THE CHILDREN'S SELECTIONS OF THE AWARD BOOK AND RUNNERS-UP FOR 1978

N=384

Title	Mean	SD	Caldecott Award Winner	First Choice of Children	t	Level of Significance
Castle	28.49	6.66	0	0	0	0
Worse	21.88	7.49				
Noah	15.23	6.82	*	**		

Both the children and the Caldecott Committee selected Noah for first place. Since there was no difference between the selections, a t value could not be computed. Thus, there was no significant difference between the two groups. Null hypothesis number 1 was accepted.

Table 6 shows the results of the selections of the books included in 1980.

TABLE 6

A COMPARISON OF THE CALDECOTT COMMITTEE'S AND THE CHILDREN'S SELECTIONS OF THE AWARD BOOK AND RUNNERS-UP FOR 1980

N=384

Title	Mean	SD	Caldecott Award Winner	First Choice of Children	t	Level of Significance
Ben	40.49	9.30				0.001
Abdul	27.15	9.82				
Ox Cart	22.96	9.90	*			
Treasure	18.63	10.19		**		

The children in the survey selected the Committee's first choice as their second choice. The t value between the Medal winner, Ox Cart, and the children's selection, Treasure was 10.56. This was significantly different from the table value if 3.29 at the .001 level. Null hypothesis number 1 was rejected.

The children's and Committee's choices for book selection for 1982 are shown in Table 7.

TABLE 7

A COMPARISON OF THE CALDECOTT COMMITTEE'S AND THE CHILDREN'S SELECTIONS OF THE AWARD BOOK AND RUNNERS-UP FOR 1982

N=384

Title	Mean	SD	Caldecott Award Winner	First Choice of Children	t	Level of Significance
Buffaloes	42.58	15.98			20.4	0.001
Jumanji	42.88	15.25	*			
Market	31.36	15.77				
Outside	24.52	14.76		**		
Blake	33.61	15.08				

Table 7 shows that the children selected Outside as their first choice. The Committee selected Jumanji, which was the children's last choice.

The t value between the two books was 20.4, which is greater than the table value of 3.29 at the .001 level of significance. Null hypothesis number 1 was rejected.

Table 8 shows the results of the selection of books for 1984.

TABLE 8

A COMPARISON OF THE CALDECOTT COMMITTEE'S AND THE CHILDREN'S SELECTIONS OF THE AWARD BOOK AND RUNNERS-UP FOR 1984

N=384

Title	Mean	SD	Caldecott Award Winner	First Choice of Children	t	Level of Significance
Flight	24.55	12.12	*		36.4	0.001
Red	14.65	6.65		**		
Ten	27.13	5.91				

Of the three titles selected in 1984, the children selected Little Red Riding Hood as their first choice. The Caldecott Award Committee selected Glorious Flight, which was the children's second choice.

The t value of 36.37 is greater than the table value of 3.29 at the .001 level of significance. Null hypothesis number 1 was rejected.

Summary of Part One

A t-test was used to compare the difference observed between the Caldecott Committee's choice for a Medal Award and the children's selection. Null hypothesis number 1 was rejected in five of the seven years surveyed.

Table 9 shows the titles of the books and the children's ratings (1, 2, or 3) for each of the artistic styles used in the picture books.

The children gave first place votes in five years to full line illustrations. One year, 1972, there were no full

TABLE 9

Titles and Ratings for Each Artistic Style

Year	Photographic b/w	Photographic colored	Full line Black and White	Full line colored	Cartoon colored	Painterly colored	Painterly b/w
1972			Hildid (4)		Seas (2)	Day (1)	Moja (3)
1974			Cathedral (3)	Huntsmen (1)	Duffy (2)		
1976				Nona (1) Desert (2) Mosquitoes (3)			
1978			Castle (3)	Noah (1) Worse (2)			
1980			Abdul (3) Ben (4)	Treasure (1) Ox Cart (2)			
1982	Jumanji (5)	Outside (1)	Buffaloes (4)	Market (2)	Blake (3)		
1984				Red (1)	Flight (2)	Ten (3)	

Note: Numbers indicate the order of the children's choices

line colored books from which to choose, and the children selected Day, which had colored painterly pictures. However, in 1982, although one of the books had full line colored drawings, the children selected Outside as their first choice.

Full line colored drawings were also selected as second most popular four times. In 1976 there was no other choice of style, and in 1978 two books were illustrated in that style and one was black and white painterly.

The children also selected for their second choices two books with colored illustrations and one colored photographic.

The only year in which the children chose full line colored pictures as their third choice was in 1976 when there were no other styles used. In three years black and white full line illustrations were selected as third choices. In 1972 and 1982, the children selected colored cartoon styles, and in 1983, third place was given to Ten which was executed in colored painterly.

Black and white pictures, regardless of style, always received last votes. Jumanji, the 1982 Caldecott Medal winner was the children's last (fifth) choice. Both Castle and Cathedral by David Macauley fell into last places. Others in this category were Hildilid, Moja, Buffaloes, Abdul, and Ben.

Part Two

Part two of this study was conducted to determine if there were statistically significant relationships between the canonical variate sets of grade, reading level, race, sex and school system and the variables of the books' picture styles for each of the seven years in the study.

TABLE 10

Canonical Variates, Corresponding Correlations, and Chi Square

Canonical Variate Sets	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.25762	41.25604	20
2	.14458	15.29700	12
3	.13600	7.31164	6
4	.02525	.25455	2
5	Too insignificant to compute		

$p^{.10} = 28.412$

The canonical coefficient is .25762 for the first canonical variate set. This statistic corresponds to a Chi Square value of 41.25604. This statistic is significant at the .10 level. Further analysis reveals that the remainder of the canonical variates are not significant at the .01 level. Thus there is a significant relationship between the

five independent variables and the books selected. Null hypothesis number 2 is rejected.

Tables numbered eleven through fifty-two show the canonical correlations between the variables for the seven years. Tables 16, 22, 28, 34, 40, 46 and 52 list the titles and artistic styles. Black and white illustrations are indicated with "b&w".

The canonical correlations find "successive pairs of linear composites that are maximally correlated." The plotting program used is a matrix incorporating a zero mean and unit standard deviations.[1] Thus, the resulting correlations may attain a range of 3.00 in the X and Y axis.

Tables for 1972

TABLE 11

Grade with 1972 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1972

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.148	8.379	4

$p_{.10} = 7.779$

The canonical correlation is .148. The Chi Square value is 8.379 which is significant at the .10 level. Thus, there is a significant relationship between grades one, two and three and the book selection for the 1972 group of picture books. Null hypothesis number 3 is rejected.

TABLE 12

Reading Level with 1972 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1972

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
2	.145	8.095	4

$p^{.10} = 7.779$

The canonical correlation is .145. The Chi Square value is 8.095 which is significant at the .10 level. Thus, there is a significant relationship between low, average and high reading levels and book selection for the 1972 group of picture books. Null hypothesis number 4 is rejected.

TABLE 13

Race with 1972 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1972

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
3	.082	2.568	4

$p^{.10} = 7.779$

The canonical correlation is .082. The Chi Square value is 2.568 which is not significant at the .10 level. Thus, there is no significant relationship between black and

white children and book selection for the 1972 group of picture books. Null hypothesis number 5 is accepted.

TABLE 14

Sex with 1972 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1972

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
4	.198	15.221	4

$p^{.10} = 7.779$

The canonical correlation is .198. The Chi Square value is 15.221 which is significant at the .10 level. Thus, there is a significant relationship between the boys and girls and book selection for the 1972 group of picture books. Null hypothesis number 6 is rejected.

TABLE 15

School System with 1972 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1972

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
5	.137	7.173	4

$p^{.10} = 7.779$

The canonical correlation is .137. The Chi Square value is 7.173, which is not significant at the .10 level. Thus, there is no significant relationship between the three school systems attended and book selection for the 1972 group of picture books. Null hypothesis number 7 is accepted.

TABLE 16

Coefficients for Canonical Variable for 1972

N=384

Books	Grade	Reading	Race	Sex	System
Hildilid - full line b&w					
r	-.42	-.52	.37	.64	-.02
p	.08	.09	.63	.004	.13
Seas - cartoon colored					
r	.56	-.62	.82	.45	-.20
p	.82	.09	.63	.004	.13
Moja - painterly b&w					
r	.33	-.06	.45	.41	.90
p	.08	.09	.63	.004	.13
Day - painterly colored					
r	.72	.49	-.19	-.41	-.26
p	.08	.09	.63	.004	.133

p = level of significance

By Grade

The strongest coefficient of correlation between grade and picture style was .72 with a .08 level of significance. This supported the selection of Day with colored painterly illustrations by grade (dependent variable). The next strongest coefficient of correlation between grade and picture style was .56. This supported the selection of Seas with colored cartoon illustrations by grade (dependent variable). There was a coefficient of correlation of .33 between grade and Moja, which has black and white painterly illustrations. The lowest coefficient of correlation between grade and picture style was -.42. This indicated negative support for the selection of Hildilid, with full line black and white illustrations by grade (dependent variable).

Day, with colored painterly illustrations, was the children's first choice in the 1972 group of books. It had the strongest coefficient of correlation by grade (dependent variable). Null hypothesis number 8 is rejected.

By Reading Level

The strongest coefficient of correlation between reading level and picture style is .49 with a .09 level of significance. This supports the selection of Day with colored painterly illustrations by reading level (dependent variable). The remaining coefficients of correlation between reading level and illustrative styles were all

negative, showing an inverse relationship between the dependent variable, reading level and picture styles.

There was a negative correlation of -.06 between reading level and Moja, with black and white painterly illustrations, -.52 between reading level and Hildilid, with black and white full line illustrations and -.62 between reading level and Seas with colored cartoon illustrations.

Day, with colored painterly illustrations, was the children's first choice in the 1972 group of books. It had the strongest coefficient of correlation by reading level (dependent variable). Null hypothesis number 9 is rejected.

By Race

The strongest coefficient of correlation between race and picture style is .82 with a .63 level of significance. This supports the selection of Seas, with colored cartoon illustrations, by race (dependent variable). The next strongest coefficient of correlation between race and picture style is .45. This supports the selection of Moja, with black and white painterly illustrations by race (dependent variable). There is a coefficient of correlation of .37 between race and Hildilid, which has black and white full line drawings. The coefficient of correlation between race and picture style is -.19. This indicates negative support for the selection of Day, with colored painterly illustrations by dependent variable, race.

Day, with colored painterly illustrations, was the children's first choice in the 1972 group of books. It has

the lowest coefficient of correlation by race (dependent variable). Null hypothesis number 10 is accepted.

By Sex

The strongest coefficient of correlation between sex and picture style is .64 with a .004 level of significance. This supports the selection of Hildilid with black and white full line illustrations by sex (dependent variable). The next strongest coefficient of correlation between sex and picture style is .45. This supports the selection of Seas with colored cartoon illustrations by sex (dependent variable). There is a coefficient of correlation of .41 between sex and Moja, which has black and white painterly illustrations. There is a low inverse coefficient of correlation of -.41 between sex and Day. This indicates little support for the selection of Day, with colored painterly illustrations by sex (dependent variable).

Day, with colored painterly illustrations, was the children's first choice in the 1972 group of books. It had the lowest coefficient of correlation by sex (dependent variable). Null hypothesis number 11 is rejected.

By School System

The strongest coefficient of correlation between school system and picture style is .90 with a .13 level of significance. This supports the selection of Moja with black and white painterly illustrations by school system (dependent variable). The remaining coefficients of

correlation were all negative. There was a coefficient of correlation of -.02 between school system and Hildilid with black and white full line illustrations, -.20 between school system and Seas with colored cartoon illustrations and -.26 between school system and Day with colored painterly illustrations.

Day, with colored painterly illustrations, was the children's first choice in the 1972 group of books. It had the lowest coefficient of correlation by school system (dependent variable). Null hypothesis number 12 is rejected.

Tables for 1974

TABLE 17

Grade with 1974 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1974

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.161	10.013	3

$p_{.10} = 6.251$

The canonical correlation is .161. The Chi Square value is 10.013 which is significant at the .10 level. Thus, there is a significant relationship between grades one, two and three and the book selection for the 1974 group of picture books. Null hypothesis number 3 is rejected.

TABLE 18

Reading Level with 1974 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1974

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
2	.108	4.495	3

$p_{.10} = 6.251$

The canonical correlation is .108. The Chi Square value is 4.495 which is significant at the .10 level. Thus, there is a significant relationship between low, average and high reading levels and book selection for the 1974 group of picture books. Null hypothesis number 4 is rejected.

TABLE 19

Race with 1974 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1974

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
3	.059	1.028	2

$p_{.10} = 4.605$

The canonical correlation is .059. The Chi Square value is 1.028 which is not significant at the .10 level. Thus, there is no significant relationship between black and

white children and book selection for the 1974 group of picture books. Null hypothesis number 5 is accepted.

TABLE 20

Sex with 1974 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1974

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
4	.319	40.705	3

$p^{.10} = 6.251$

The canonical correlation is .319. The Chi Square value is 40.705 which is significant at the .10 level. Thus, there is a significant relationship between the boys and girls and book selection for the 1974 group of picture books. Null hypothesis number 6 is rejected.

TABLE 21

School System with 1974 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1974

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
5	.058	1.288	3

$p^{.10} = 6.251$

The canonical correlation is .058. The Chi Square value is 1.288, which is not significant at the .10 level. Thus, there is no significant relationship between the three school systems attended and book selection for the 1974 group of picture books. Null hypothesis number 7 is accepted.

TABLE 22

Coefficients for Canonical Variable for 1974

N=384

Books	Grade	Reading	Race	Sex	System
Cathedral - full line b&w					
r	-.32	-.44	-.93	.76	-.30
p	.02	.21	.60	.001	.73
Duffy - cartoon colored					
r	-.20	.78	NS	-.55	-.85
p	.02	.21	NS	.001	.73
Huntsmen - full line colored					
r	.83	.42	-.59	.07	-.83
p	.02	.21	.60	.001	.73

p = level of significance

By Grade

The strongest coefficient of correlation between grade and picture style was .83 with a .02 level of significance. This supported the selection of Huntsmen with full line colored illustrations by grade (dependent variable).

The remaining coefficients of correlation between grade and picture style were negative, showing an inverse relationship between the dependent variable, grade and picture style. There was a negative correlation of -.20 between grade and Duffy, with colored cartoon illustrations and -.32 between grade and Cathedral, with black and white full line illustrations.

Huntsmen, with colored full line illustrations, was the children's first choice in the 1974 group of books. It had the strongest coefficient of correlation by grade (dependent variable). Null hypothesis number 8 is rejected.

By Reading Level

The strongest coefficient of correlation between reading level and picture style is .78 with a .21 level of significance. This supports the selection of Duffy with colored cartoon illustrations by reading level (dependent variable). The next strongest coefficient of correlation between reading level and picture style is .42. This supports the selection of Huntsmen, with colored full line illustrations. The lowest coefficient of correlation between reading level and picture style is -.44. This indicates negative support for the selection of Cathedral, with black and white full line illustrations by reading level (dependent variable).

Huntsmen, with colored full line illustrations, was the children's first choice in the 1974 group of books. It did not have the strongest coefficient of correlation by

reading level (dependent variable). Null hypothesis number 9 is accepted.

By Race

There are low inverse coefficients of correlation between race and picture style in 1974. There is a coefficient of correlation -.59 with a .60 level of significance between race and Huntsmen with colored full line illustrations. The correlation for Duffy, with colored cartoon illustrations, was too insignificant to compute.

Huntsmen, with colored, full line illustrations, was the children's first choice in the 1974 group of books. It had a negative coefficient of correlation by race (dependent variable). Null hypothesis number 10 is accepted.

By Sex

The strongest coefficient of correlation between sex and picture style is .76 with a .001 level of significance. This supports the selection of Cathedral with black and white full line illustrations. The next strongest coefficient of correlation between sex and picture style was .07. This supports the selection of Huntsmen with colored, full line illustrations. The lowest coefficient of correlation is -.55. This indicates negative support for the selection of Duffy, with colored cartoon illustrations by sex (dependent variable).

Huntsmen, with colored, full line illustrations, was the children's first choice in the 1974. It did not have

the strongest coefficient of correlation by sex (dependent variable). Null hypothesis number 11 is accepted.

By School System

All three coefficients of correlation between school system and picture style were negative, showing an inverse relationship between school system and picture style. There was a coefficient of -.30 between school system and Cathedral, with black and white, full line illustrations; -.83 between school system and Huntsmen, with colored, full line illustrations and -.85 between school system and Duffy, with colored cartoon illustrations.

Huntsmen, with colored, full line illustrations, was the children's first choice in the 1974 group of books. It did not have the strongest coefficient of correlation by school system (dependent variable). Null hypothesis number 12 is accepted.

Tables for 1976

TABLE 23

Grade with 1976 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1976

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.160	9.920	3

$p_{.10} = 6.251$

The canonical correlation is .160. The Chi Square value is 9.920, which is significant at the .10 level. Thus, there is a significant relationship between grades one, two and three and book selection for the 1976 group of picture books. Null hypothesis number 3 is rejected.

TABLE 24

Reading Level with 1976 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1976

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
2	.126	6.100	3

$p_{.10} = 6.251$

The canonical correlation is .126. The Chi Square is 6.100, which is not significant at the .10 level. Thus, there is no significant relationship between the low, average and high reading levels and book selection for the 1976 group of books. Null hypothesis number 4 is accepted.

TABLE 25

Race with 1976 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1976

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
3	.034	.434	2

$p^{.10} = 4.605$

The canonical correlation is .034. The Chi Square value is .434, which is not significant at the .10 level. Thus, there is no significant relationship between black and white children and book selection for the 1976 group of picture books. Null hypothesis number 5 is accepted.

TABLE 26

Sex with 1976 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1976

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
4	.121	5.574	3

$p^{.10} = 6.251$

The canonical correlation is .121. The Chi Square value is 5.574, which is not significant at the .10 level. Thus, there is no significant relationship between boys and

girls and book selection for the 1976 group of books. Null hypothesis number 6 is accepted.

TABLE 27

School System with 1976 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1976

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
5	.036	.495	3

$p^{.10} = 6.251$

The canonical correlation is .036. The Chi Square value is .495, which is not significant at the .10 level. Thus, there is no significant relationship between the three school systems attended and the book selection for the 1976 group of books. Null hypothesis number 7 is accepted.

TABLE 28

Coefficients for Canonical Variable for 1976

N=384

Books	Grade	Reading	Race	Sex	System
Desert - full line colored					
r	.37	-.76	-1.00	-.03	-.71
p	.02	.11	.81	.13	.92
Nona - full line colored					
r	1.02	.29	NS	-1.01	.72
p	.02	.11	.81	.13	.92
Mosquitoes - full line colored					
r	.02	.48	-.08	-.52	.29
p	.02	.11	.81	.13	.92

p = level of significance

By Grade

The strongest coefficient of correlation between grade and picture style is 1.02 with a .02 level of significance. This supports the selection of Nona with colored, full line illustrations by grade (dependent variable). The next strongest coefficient of correlation between grade and picture style is .37. This supports the selection of Desert which also has colored, full line illustrations. The lowest coefficient of correlation is .02 between grade and Mosquitoes, which also has full line colored illustrations.

Nona, with colored, full line illustrations, was the children's first choice in the 1976 group of books. It had the strongest coefficient of correlation by grade (dependent variable). Null hypothesis number 8 is rejected.

By Reading Level

The strongest coefficient of correlation between reading level and picture style is .48 with a .11 level of significance. This supports the selection of Mosquitoes with colored, full line illustrations by reading level (dependent variable). The next strongest coefficient of correlation between reading level is .29. This supports the selection of Nona, which has colored, full line illustrations. The lowest coefficient of correlation between reading level and picture style is -.76. This indicates negative support for the selection of Desert, with colored full line illustrations by reading level (dependent variable).

Nona, with colored, full line illustrations, was the children's first choice in the 1976 group of books. It had the strongest coefficient of correlation by reading level (dependent variable). Null hypothesis number 9 is rejected.

By Race

Two of the coefficients of correlation between race and picture style were negative and the third was too insignificant to compute. There was a negative correlation of -.08 between race and Mosquitoes, with colored, full line

illustrations and -.1.00 between race and Desert. The coefficient of correlation between race and Nona was too insignificant to compute.

Nona, with colored, full line illustrations, was the children's first choice in the 1976 groups of books. It did not have the strongest coefficient of correlation by race (dependent variable). Null hypothesis number 10 is accepted.

By Sex

All three coefficients of correlation between sex and picture style for the 1976 group of books are negative. There is a negative coefficient of correlation of -.03 with a .13 level of significance between sex and Desert, with colored, full line illustrations; -.52 between sex and Mosquitoes, with colored, full line illustrations; and -1.01 between sex and Nona, also with colored, full line illustrations.

Nona, with colored, full line illustrations, was the children's first choice in the 1976 group of books. It did not have the strongest coefficient of correlation by sex (dependent variable). Null hypothesis number 11 is accepted.

By School System

The strongest coefficient of correlation between school system and picture style is .72 with a .92 level of significance. This supports the selection of Nona with

colored, full line illustrations by school system (dependent variable). The next strongest coefficient of correlation is .29. This supports the selection of Mosquitoes by school system (dependent variable). There is a low, inverse coefficient of correlation of -.71 between school system and Desert. This indicates little support for the selection of Desert with colored, full line illustrations.

Nona, with colored, full line illustrations, was the children's first choice in the 1976 group of books. It had the strongest coefficient of correlation by school system (dependent variable). Null hypothesis number 12 is rejected.

Tables for 1978

TABLE 29

Grade with 1978 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1978

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.070	1.856	3

$p^{.10} = 6.251$

The canonical correlation is .070. The Chi Square value is 1.856, which is not significant at the .10 level. Thus, there is no significant relationship between grades one, two and three and book selection for the 1978 group of picture books. Null hypothesis number 3 is accepted.

TABLE 30

Reading Level with 1978 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1978

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
2	.131	6.629	3

$p_{.10} = 6.251$

The canonical correlation is .131. The Chi Square value if 6.629, which was significant at the .10 level. Thus, there is a significant relationship between low, average and high reading levels and book selection in the 1978 group of books. Null hypothesis number 4 is rejected.

TABLE 31

Race with 1978 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1978

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
3	.086	2.477	3

$p_{.10} = 6.251$

The canonical correlation is .086. The Chi Square value is 2.477, which is not significant at the .10 level. Thus, there is no significant relationship between black and

white children and book selection in the 1978 group of books. Null hypothesis number 5 is accepted.

TABLE 32

Sex with 1978 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1978

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
4	.169	11.064	3

$p^{.10} = 6.251$

The canonical correlation is .169. The Chi Square value is 11.064, which is significant at the .10 level. Thus, there is a significant relationship between the boys and girls and book selection for the 1978 group of books. Null hypothesis number 6 is rejected.

TABLE 33

School System with 1978 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1978

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
5	.224	19.653	3

$p^{.10} = 6.251$

The canonical correlation is .224. The Chi Square value if 19.653, which is significant at the .10 level. Thus, there is a significant relationship between the three school systems attended and book selection for the 1978 group of books. Null hypothesis number 7 is rejected.

TABLE 34

Coefficients for Canonical Variable for 1978

N=384

Books	Grade	Reading	Race	Sex	System
Castle - full line b&w					
r	.24	.75	.75	.41	.34
p	.60	.09	.48	.01	.00
Worse - full line colored					
r	-.02	.24	-.45	-.84	.50
p	.60	.09	.48	.01	.00
Noah - full line colored					
r	1.01	.87	.43	.42	-.64
p	.60	.09	.48	.01	.00

p = level of significance

By Grade

The strongest coefficient of correlation between grade and picture style was 1.01 with a .60 level of significance. This supports the selection of Noah, with colored, full line illustrations by grade (dependent variable). The next strongest coefficient of correlation

was .24. This supported the selection of Castle, which has black and white, full line illustrations. The lowest coefficient of correlation between grade and picture style was -.02. This indicated negative support for the selection of Worse, with colored, full line illustrations by grade (dependent variable).

Noah, with colored, full line illustrations, was the children's first choice in the 1978 group of books. It had the strongest coefficient of correlation by grade (dependent variable). Null hypothesis number 8 is rejected.

By Reading Level

The strongest coefficient of correlation between reading level and picture style was .87 with a .09 level of significance. This indicated the selection of Noah with colored, full line illustrations. The next strongest coefficient of correlation between reading level and picture style was .75. This supported the selection of Castle with black and white, full line illustrations by reading level (dependent variable). The lowest coefficient of correlation was .24. This supported the selection of Worse with colored, full line illustrations by reading level (dependent variable). (Table 34)

Noah, with colored, full line illustrations, was the children's first choice in the 1978 group of books. It had the strongest coefficient of correlation by reading level (dependent variable). Null hypothesis number 9 is rejected.

By Race

The strongest coefficient of correlation between race and picture style was .75 with a .48 level of significance. This supported the selection of Castle with black and white, full line illustrations by race (dependent variable). The next strongest coefficient of correlation between race and picture style was .43. This supported the selection of Noah with colored, full line illustrations by race (dependent variable). The lowest coefficient of correlation between race and picture style was -.45. This indicated negative support for the selection of Worse with colored, full line illustrations by race (dependent variable).

Noah, with colored, full line illustrations, was the children's first choice in the 1978 group of books. It did not have the strongest coefficient of correlation by race (dependent variable). Null hypothesis number 10 is accepted.

By Sex

The strongest coefficient of correlation between sex and picture style was .42 with a .01 level of significance. This supported the selection of Noah with colored, full line illustrations by sex (dependent variable). The next strongest coefficient of correlation between sex and picture style was .41. This supported the selection of Castle with black and white, full line illustrations by sex (dependent variable). The lowest coefficient of correlation between sex and picture style was -.84. This indicated negative

support for the selection of Worse, with colored, full line illustrations by sex (dependent variable).

Noah, with colored, full line illustrations, was the children's first choice in the 1978 group of books. It had the strongest coefficient of correlation by sex (dependent variable). Null hypothesis number 11 is rejected.

By School System

The strongest coefficient of correlation between school system and picture style was .50 with a .001 level of significance. This supported the selection of Worse with colored, full line illustrations by school system (dependent variable). The next strongest coefficient of correlation was .34. This supported the selection of Castle with black and white, full line illustrations by school system (dependent variable). The lowest coefficient of correlation was -.64. This indicated negative support for the selection of Noah with colored, full line illustrations by school system (dependent variable).

Noah, with colored, full line illustrations, was the children's first choice for the 1978 group of books. It did not have the strongest coefficient of correlation by school system (dependent variable). Null hypothesis number 12 is accepted.

Tables for 1980

TABLE 35

Grade with 1980 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1980

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.109	4.523	4

$p^{.10} = 7.779$

The canonical correlation is .109. The Chi Square value is 4.523 which is not significant at the .10 level. Thus, there is no significant relationship between grades one, two and three and the book selection for the 1980 group of picture books. Null hypothesis number 3 is accepted.

TABLE 36

Reading Level with 1980 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1980

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
2	.085	2.773	4

$p^{.10} = 7.779$

The canonical correlation is .085. The Chi Square value is 2.773 which is not significant at the .10 level. Thus, there is no significant relationship between low,

average and high reading levels and book selection for the 1980 group of picture books. Null hypothesis number 4 is accepted.

TABLE 37

Race with 1980 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1980

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
3	.095	3.478	4

$p_{.10} = 7.779$

The canonical correlation is .095. The Chi Square value is 3.478 which is not significant at the .10 level. Thus, there is no significant relationship between black and white children and book selection for the 1980 group of picture books. Null hypothesis number 5 is accepted.

TABLE 38

Sex with 1980 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1980

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
4	.139	7.440	4

$p_{.10} = 7.779$

The canonical correlation is .139. The Chi Square value is 7.440 which is not significant at the .10 level. Thus, there is no significant relationship between the boys and girls and book selection for the 1980 group of picture books. Null hypothesis number 6 is accepted.

TABLE 39

School System with 1980 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1980

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
5	.205	16.283	4

$p^{.10} = 6.251$

The canonical correlation is .205. The Chi Square value is 16.283, which is significant at the .10 level. Thus, there is a significant relationship between the three school systems attended and book selection for the 19802 group of picture books. Null hypothesis number 7 is rejected.

TABLE 40

Coefficients for Canonical Variable for 1980

N=384

Books	Grade	Reading	Race	Sex	System
Ben - full line b&w					
r	-.58	-.65	-.51	.15	-.38
p	.34	.60	.48	.12	.003
Abdul - full line b&w					
r	.30	-.30	.20	.16	.24
p	.34	.60	.48	.12	.003
Ox-Cart - full line color					
r	-.28	-.45	-.36	-.51	.67
p	.34	.60	.48	.12	.003
Treasure - full line color					
r	.02	.48	-.08	-.52	.29
p	.34	.60	.48	.12	.003

p = level of significance

By Grade

The strongest coefficient of correlation between grade and picture style was .30 with a .34 level of significance. This supported the selection of Abdul with black and white, full line illustrations by grade (dependent variable). The next strongest coefficient of correlation between grade and picture style was .02. This supported the

selection of Treasure with colored, full line illustrations by grade (dependent variable). The two remaining coefficient of correlation were negative. The coefficients of correlation of -.28 indicated negative support for the selection of Ox-Cart, with colored, full line illustrations and -.58 indicated negative support for the selection of Ben, with black and white, full line illustrations by grade (dependent variable).

Treasure, with colored full line illustrations, was the children's first choice in the 1980 group of books. It did not have the strongest coefficient of correlation by grade (dependent variable). Null hypothesis number 8 is accepted.

By Reading Level

The strongest coefficient of correlation between reading level and picture style is .48 with a .60 level of significance. This supported the selection of Treasure with colored full line illustrations by reading level (dependent variable). The remaining coefficients of correlation between reading level and illustrative styles were all negative. The coefficients of correlation of -.30 indicated negative support for Abdul, with black and white illustrations; -.45 indicated negative support for Ox-Cart, with colored, full line illustrations; and -.65 indicated negative support for Ben, with black and white illustrations by reading level (dependent variable).

Treasure, with colored full line illustrations, was the children's first choice in the 1980 group of books. It had the strongest coefficient of correlation by reading level (dependent variable). Null hypothesis number 9 is rejected.

By Race

The strongest coefficient of correlation between race and picture style was .20 with a .48 level of significance. This supported the selection of Abdul with black and white, full line illustrations by race (dependent variable). The remainder of the coefficients of correlation were all negative. The coefficients of correlation of -.08 indicated negative support for the selection of Treasure with colored, full line illustrations; -.36 indicated negative support for the selection of Ox-Cart with colored, full line illustrations; ans -.65 indicated negative support for Ben with black and white, full line illustrations by race (dependent variable).

Treasure, with colored, full line illustrations, was the children's first choice in the 1980 group of books. It did not have the strongest coefficient of correlation by race (dependent variable). Null hypothesis number 10 is accepted.

By Sex

The strongest coefficient of correlation between sex and picture style is .16 with a .12 level of significance.

This supported the selection of Abdul with black and white full line illustrations by sex (dependent variable). The next strongest coefficient of correlation between sex and picture style was .15. This supports the selection of Ben with black and white, full line illustrations by sex (dependent variable). The remaining coefficients of correlation were both negative. The coefficients of correlation of -.51 indicated negative support for the selection of Ox-Cart with colored, full line illustrations and -.52 indicated negative support for the selection of Treasure with colored, full line illustrations by sex (dependent variable).

Treasure, with colored, full line illustrations, was the children's first choice in the 1980 group of books. It did not have the strongest coefficient of correlation by sex (dependent variable). Null hypothesis number 11 is accepted.

By School System

The highest coefficient of correlation between school system and picture style was .67 with a .003 level of significance. This supported the selection of Ox-Cart with colored, full line illustrations by school system (dependent variable). The next strongest coefficient of correlation was .29. This supported the selection of Treasure with colored, full line illustrations by school system (dependent variable). The next strongest coefficient of correlation was .24. This supported the selection of Abdul with black and white, full line illustrations by school system (depen-

dent variable). The lowest coefficient of correlation between school system and picture style was -.38. This indicated negative support for the selection of Ben with black and white, full line illustrations by school system (dependent variable).

Treasure, with colored, full line illustrations, was the children's first choice in the 1980 group of books. It did not have the strongest coefficient of correlation by school system (dependent variable). Null hypothesis number 12 is accepted.

Tables for 1982

TABLE 41

Grade with 1982 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1982

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.067	1.726	5

$p^{.10} = 9.236$

The canonical correlation is .067. The Chi Square value is 1.726 which is not significant at the .10 level. Thus, there is no significant relationship between grades one, two and three and the book selection for the 1982 group of picture books. Null hypothesis number 3 is accepted.

TABLE 42

Reading Level with 1982 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1982

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
2	.142	7.782	5

$p^{.10} = 9.236$

The canonical correlation is .142. The Chi Square value is 7.782 which is not significant at the .10 level. Thus, there is no significant relationship between low, average and high reading levels and book selection for the 1982 group of picture books. Null hypothesis number 4 is accepted.

TABLE 43

Race with 1982 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1982

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
3	.124	5.853	5

$p^{.10} = 9.236$

The canonical correlation is .124. The Chi Square value is 5.853 which is not significant at the .10 level. Thus, there is no significant relationship between black and

white children and book selection for the 1972 group of picture books. Null hypothesis number 5 is accepted.

TABLE 44

Sex with 1982 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1982

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
4	.209	16.989	5

$p^{.10} = 9.236$

The canonical correlation is .209. The Chi Square value is 16.989 which is significant at the .10 level. Thus, there is a significant relationship between the boys and girls and book selection for the 1982 group of picture books. Null hypothesis number 6 is rejected.

TABLE 45

School System with 1982 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1982

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
5	.243	23.134	5

$p^{.10} = 9.236$

The canonical correlation is .243. The Chi Square value is 23.134, which is significant at the .10 level. Thus, there is a significant relationship between the three school systems attended and book selection for the 1982 group of picture books. Null hypothesis number 7 is rejected.

TABLE 46

Coefficients for Canonical Variable for 1982

N=384

Books	Grade	Reading	Race	Sex	System
Buffaloes - full line b&w					
r	.53	-.53	.22	.37	-.35
p	.87	.17	.32	.01	.001
Jumanji - photographic b&w					
r	.43	.36	.27	.28	.17
p	.87	.17	.32	.01	.001
Market - full line colored					
r	.37	.22	-.55	-.28	.03
p	.87	.17	.32	.01	.001
Outside - photographic colored					
r	.04	.63	-.33	-.63	-.86
p	.87	.17	.32	.01	.001
Blake - painterly colored					
r	.66	-.30	-.63	.47	.29
p	.87	.17	.32	.01	.001

p = level of significance

By Grade

The strongest coefficient of correlation between grade and picture style was .66 with a .87 level of significance. This supported the selection of Blake with colored,

painterly illustrations by grade (dependent variable). The next strongest coefficient of correlation between grade and picture style was .53. This supported the selection of Buffaloes with black and white, full line illustrations by grade (dependent variable). The next strongest coefficient of correlation was .43. This supported the selection of Jumanji with black and white, photographic illustrations by grade (dependent variable). The next strongest coefficient of correlation was .37. This supported the selection of Market, with colored, full line illustrations by grade (dependent variable). The lowest coefficient of correlation was .04. This indicated little support for the selection of Outside, with colored, photographic illustrations by grade (dependent variable).

Outside, with colored photographic illustrations, was the children's first choice in the 1982 group of books. It did not have the strongest coefficient of correlation by grade (dependent variable). Null hypothesis number 8 is accepted.

By Reading Level

The strongest coefficient of correlation between reading level and picture style was .63 with a .17 level of significance. This supported the selection of Outside with colored photographic illustrations by reading level (dependent variable). The next strongest coefficient of correlation was .36. This supported the selection of Jumanji with black and white photographic illustrations by reading level

(dependent variable). The next strongest coefficient of correlation was .22. This supported the selection of Market with colored full line illustrations by reading level (dependent variable). The two remaining coefficients of correlation were negative. The coefficients of correlation of -.30 indicated negative support for the selection of Blake with colored, painterly illustrations and -.53 also indicated negative support for the selection of Buffaloes with black and white, full line illustrations by reading level (dependent variable).

Outside, with colored photographic illustrations, was the children's first choice in the 1982 group of books. It had the strongest coefficient of correlation by reading level (dependent variable). Null hypothesis number 9 is rejected.

By Race

The strongest coefficient of correlation between race and picture style was .27 with a .32 level of significance. This supported the selection of Jumanji with black and white photographic illustrations by race (dependent variable). The next strongest coefficient of correlation between race and picture style was .22. This supported the selection of Buffaloes with black and white, full line illustrations by race (dependent variable). The remaining three coefficients of correlation were negative, showing an inverse relationship between race and picture style. There was a coefficient of correlation of -.33 between race and Outside,

with colored, photographic illustrations; -.55 between race and Market, with colored, full line illustrations; and -.63 between race and Blake, with colored painterly illustrations by race (dependent variable).

Outside, with colored, photographic illustrations, was the children's first choice in the 1982 group of books. It did not have the strongest coefficient of correlation by race (dependent variable). Null hypothesis number 10 is accepted.

By Sex

The strongest coefficient of correlation between sex and picture style was .47 with a .01 level of significance. It supported the selection of Blake with colored painterly illustrations by sex (dependent variable). The next strongest coefficient of correlation was .37. It supported the selection of Buffaloes with black and white, full line illustrations by sex (dependent variable). The next strongest coefficient of correlation was .28. It supported the selection of Jumanji with black and white, photographic illustrations by sex (dependent variable). The remaining two coefficients of correlation were negative, showing an inverse relationship between sex and picture style. There were coefficients of correlation of -.28 between sex and Market, with colored, full line illustrations and -.63 between sex and Outside, with colored, photographic illustrations by sex (dependent variable).

Outside, with colored photographic illustrations, was the children's first choice in the 1982 group of books. It had the lowest coefficient of correlation by sex (dependent variable). Null hypothesis number 11 is accepted.

By School System

The strongest coefficient of correlation between school system and picture style is .29 with a .001 level of significance. This supports the selection of Blake, with colored painterly illustrations by school system (dependent variable). The next strongest coefficient of correlation between school system and picture style is .17. This supports the selection of Jumanji, with black and white, photographic illustrations by school system (dependent variable). There is a low coefficient of correlation of .03 between school system and Market, which has colored full line illustrations. The remaining two coefficients of correlation were negative, showing an inverse relationship between school system and picture style. There were coefficients of correlation of -.35 between school system and Buffaloes, with black and white, full line illustrations, -.86 between school system and Outside, with colored photographic illustrations by school system (dependent variable).

Outside, with colored photographic illustrations, was the children's first choice in the 1982 group of books. It had the lowest coefficient of correlation by school system

(dependent variable). Null hypothesis number 12 is accepted.

Tables for 1984

TABLE 47

Grade with 1984 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1984

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
1	.119	5.404	3

$p^{.10} = 6.251$

The canonical correlation is .119. The Chi Square value is 5.404 which is not significant at the .10 level. Thus, there is no significant relationship between grades one, two and three and the book selection for the 1984 group of picture books. Null hypothesis number 3 is accepted.

TABLE 48

Reading Level with 1984 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1984

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
2	.136	7.089	3

$p^{.10} = 6.251$

The canonical correlation is .136. The Chi Square value is 7.089 which is significant at the .10 level. Thus, there is a significant relationship between low, average and high reading levels and book selection for the 1984 group of picture books. Null hypothesis number 4 is rejected.

TABLE 49

Race with 1984 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1984

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
3	.111	4.726	2

$p^{.10} = 6.251$

The canonical correlation is .111. The Chi Square value is 4.726 which is not significant at the .10 level. Thus, there is no significant relationship between black and white children and book selection for the 1984 group of picture books. Null hypothesis number 5 is accepted.

TABLE 50

Sex with 1984 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1984

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
4	.148	8.448	3

$p^{.10} = 6.251$

The canonical correlation is .148. The Chi Square value is 8.448 which is significant at the .10 level. Thus, there is a significant relationship between the boys and girls and book selection for the 1984 group of picture books. Null hypothesis number 6 is rejected.

TABLE 51

School System with 1984 winners

Canonical Variates, Corresponding Correlations, and Chi Square for 1984

Canonical Variate Set	Corresponding Canonical Correlations	Chi Square	Degrees of Freedom
5	.135	7.046	3

$p^{.10} = 6.251$

The canonical correlation is .135. The Chi Square value is 7.046, which is significant at the .10 level. Thus, there is a significant relationship between the three school systems attended and book selection for the 1984

group of picture books. Null hypothesis number 7 is rejected.

TABLE 52

Coefficients for Canonical Variable for 1984

N=384

Books	Grade	Reading	Race	Sex	System
Flight - cartoon colored					
r	-.74	-.12	-.48	.01	.82
p	.14	.07	.19	.04	.07
Red - full line colored					
r	.14	.54	.71	-.99	.17
p	.14	.07	.19	.04	.07
Ten - painterly colored					
r	-.66	-.72	-.24	-.44	-.73
p	.14	.07	.19	.04	.07

p = level of significance

By Grade

The strongest coefficient of correlation between grade and picture style was .14 with a .14 level of significance. This supported the selection of Red with colored full line illustrations by grade (dependent variable). The remaining coefficients of correlation between grade and picture style were negative, showing an inverse relationship between grade and picture style. There were coefficients of

correlation of -.66 between grade and Ten, with colored painterly illustrations and -.74 between grade and Flight, with colored cartoon illustrations by grade (dependent variable).

Red, with colored, full line illustrations, was the children's first choice in the 1984 group of books. It had the strongest coefficient of correlation by grade (dependent variable). Null hypothesis number 8 is rejected.

By Reading Level

The strongest coefficient of correlation between reading level and picture style was .54 with a .07 level of significance. This supported the selection of Red, with colored, full line illustrations by reading level (dependent variable). The remaining coefficients of correlation between reading level and illustrative styles were negative, showing an inverse relationship between reading level and picture style. There were coefficients of correlation of -.12 between reading level and Flight, with colored cartoon illustrations and -.72 between reading level and Ten, with colored painterly illustrations by reading level (dependent variable).

Red, with colored full line illustrations, was the children's first choice in the 1984 group of books. It had the strongest coefficient of correlation by reading level (dependent variable). Null hypothesis number 9 is rejected.

By Race

The strongest coefficient of correlation between race and picture style was .71 with a .19 level of significance. This supported the selection of Red, with colored, full line illustrations by race (dependent variable). The remaining coefficients of correlation were negative, showing an inverse relationship between race and picture style. There were coefficients of correlation of -.24 between race and Ten, with colored, painterly illustrations and -.48 between race and Flight with colored cartoon illustrations by race (dependent variable).

Red, with colored, full line illustrations, was the children's first choice in the 1984 group of books. It had the strongest coefficient of correlation by race (dependent variable). Null hypothesis number 10 is rejected.

By Sex

The strongest coefficient of correlation between sex and picture style is .01 with a .04 level of significance. This indicated low support the selection of Flight with colored, cartoon illustrations by sex (dependent variable). The remaining two coefficients of correlation between sex and picture style were both negative, showing an inverse relationship between sex and picture style. There were coefficients of correlation of -.44 between sex and Ten, with colored painterly illustrations and -.99 between sex and Red, with colored, full line illustrations by sex (dependent variable).

Ten, with colored painterly illustrations, was the children's first choice in the 1984 group of books. It did not have the strongest coefficient of correlation by sex (dependent variable). Null hypothesis number 11 is accepted.

By School System

The strongest coefficient of correlation between school system and picture style was .82 with a .07 level of significance. This supported the selection of Flight, with colored cartoon illustrations, by school system (dependent variable). The next strongest coefficients of correlation was .17. This supported the selection of Red, with colored, full line illustrations, by school system (dependent variable). The lowest coefficient of correlation between school system and picture style was for the selection of Ten, with colored, painterly illustrations.

Red, with colored, full line illustrations, was the children's first choice in the 1984 group of books. It did not have the strongest coefficient of correlation by school system (dependent variable). Null hypothesis number 12 is accepted.

Summary of Part Two

TABLE 53

Recapitulation of Significant Chi Squares in Survey Years

	1972	1974	1976	1978	1980	1982	1984
Set 1 grade	8.377	N.S.	9.920	N.S.	N.S.	N.S.	N.S.
Set 2 reading level	8.075	N.S.	N.S.	6.629	N.S.	N.S.	7.089
Set 3 race	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.
Set 4 sex	15.220	40.705	N.S.	11.064	N.S.	16.989	8.448
Set 5 school system	N.S.	N.S.	N.S.	19.653	16.283	23.134	7.046

Table 53, a recapitulation of the significant Chi Square values for the years in the survey indicate the following results.

Grade level was a significant factor in two of the seven years. These were 1972 and 1976.

Reading level was a significant factor in three of the seven years. These were 1972, 1978, and 1984.

Race was never a significant factor in the children's picture selection in any of the seven years.

Sex was a significant factor in five of the seven years. These were 1972, 1978, 1982 and 1984.

School system was a significant factor in four of the seven years. These were 1978, 1980, 1982 and 1984.

Thus, we find that no one variable was significant in every year. Sex was a significant variable in more years than any other variable (five). School system was significant in four years, reading level was significant in three years and grade was significant in two of the seven years. The only consistent variable was that of race, which was not significant in any of the years surveyed.

In this study, representative pictures in the following categories were used.

Photographic - colored

Outside - 1982

Painterly - colored

Day - 1972
Ten - 1984

Full line - colored

Huntsmen - 1974
Desert - 1976
Nona - 1976
Mosquitoes - 1976
Worse - 1976
Noah - 1978
Ox-Cart - 1980
Treasure - 1980
Market - 1982
Red - 1984

Cartoon - colored

Seas - 1972
Duffy - 1974
Blake - 1982
Flight - 1984

Photographic - black and white

Jumanji - 1982

Painterly - black and white

Moja - 1972

Full line black and white

Hildilid - 1972
Cathedral - 1974
Castle - 1978
Ben - 1980
Abdul - 1980
Buffaloes - 1982

TABLE 54

Variables and Artistic Styles of the Children's First Choices

Variables	Photographic b/w	Photographic colored	Full line b/w	Full line colored	Cartoon colored	Painterly colored	Painterly b/w
grade		Outside		Huntsmen Nona Noah Treasure Red		Day	
reading level		Outside		Huntsmen Nona Noah Treasure Red		Day	
race				Noah Treasure Red			
sex		Outside		Huntsmen Noah			
school system				Nona Red			

Note: Based on Tables 16, 22, 28, 34, 40, 46 and 52.

Table 54 indicates that full line colored illustrations were selected with statistical significant coefficients of correlation in the variable grade level, five times out of seven years; in variable reading level, five times; variable race, three times; variable sex, two times; and variable school system, two times.

Ten of the twenty-five books in the study had full line colored illustrations. The statistical analysis indicated that five of the ten titles with this style were selected with statistically significant correlations in the above five dependent variables.

Table 54 also indicates that one book, Outside showed statistical significance in three variables. It was the only book with colored photographic illustrations in the study. This style was selected with statistically significant coefficients of correlation in variables of grade, reading level, and sex.

The table indicates that one book, Day, shows statistical significance in two variables. It was one of two titles with colored painterly illustrations. This style was selected with statistically significant coefficients of correlation in the variables of grade and reading level.

Thus, it was found that for the children's first place choices, grade level was significant for the selection for each of the seven years. Reading level was also significant in each of the seven years. Race was significant for three years, sex was significant in three years

and system was significant in two of the seven years in the study.

Comparison with Previous Research

As stated previously, studies indicate that children prefer realistic pictures. The most realistic pictures are colored photographs, but none of the Caldecott Awards were given to books with this style, although colored photographs are not prohibited from being selected by the Committee. There were no black and white photographs in the study.

The next most realistic style is that of colored photographic. There was only one Honor Book in the survey with this style, Outside. The children selected Outside as their first choice in 1982. That year the Committee selected Jumanji with photographic black and white illustrations as the Award Winner. It was the children's last choice.

The next most realistic style is colored painterly. Only two titles, Day and Ten have pictures with this style. The children as well as the Committee selected Day as the first choice in 1972. The other three books were done in full line black and white, colored cartoon and black and white painterly. In 1984, however, the children selected Red with full line colored illustrations as their first choice. Ten was their last choice.

Full line drawings are not truly realistic, as they have the forms established by shading, rather than lines.

The Committee selected three Award Winners and seven Honor Books using these colored full line drawings. The children selected books with colored full line drawings as their first choice four times out of seven. In 1974, Huntsmen was the most realistic; in 1976, all the books had colored full line drawings; and in 1980, Treasure as well as the Committee's choice Ox-Cart had the colored, full line, the most realistic that year. However in 1984, Red, with full line colored illustrations, was selected over Ten, which has the more realistic colored painterly illustrations.

The children did not select any of the six black and white full line illustrated books as their first choice. The Committee had selected all of them as Honor Books.

Thus, if one places the books in this study in order of realism, from 1 (colored photographic) to 7 (full line black and white) it was found that in all cases but one the children selected the books with the most most realistic pictures. It should be remembered however, that for this study the children could select from only those styles which were presented to them for each of the seven years.

ENDNOTES

CHAPTER IV

[1]Paul E. Green, Analyzing Multivariate Data, (Hinsdale, Ill. Dryden, 1978.) pp. 261-263.

CHAPTER V

SUMMARY, CONCLUSIONS RECOMMENDATIONS

Summary

John Burns Warthman, in his 1970 dissertation to determine if a selected group of school children agreed with the Newbery/Caldecott Awards Committee's choices, recommended that his study be replicated in other sections of the country.

This study was conducted to determine if children in grades one, two and three would select the Caldecott Award Committee's Award Winner as their first preference. In addition, consideration was given to those variables used by Warthman; grade, reading level, race, sex and school system. Consideration was also given to style of illustration.

The subjects contributing to this study were 384 children in the first, second and third grades of three South Suburban school districts close to Chicago, Illinois. The children voted on their picture preferences of the Caldecott winners and runners-up for the years 1972, 1974, 1976, 1978, 1980, 1982 and 1984.

Two illustrations were randomly selected to represent each book. The Award Winners and Honor Books were arranged in seven groups according to the years in the survey.

In order to preserve the anonymity of the participants, the classroom teachers assigned an identifying number to each student's ballot.

Students went to the survey area, seven at a time to complete the selection process. The ballot had a beginning table number on it. The students went to the table indicated on the ballot. They then looked at the first illustration and indicated on the ballot which book they would like to read first, second, third, etc. They then moved to the next table. When all seven tables were completed by all seven students, they then repeated the process on a new ballot with the second illustration. Then then next group of students was admitted to the survey area.

For the part one results, a t-test was used to compare the difference observed between the children's selections and the Caldecott Award Winners. There was an inverse relationship between the scores. A book receiving first place votes was given a score of eleven. Those receiving second place votes were given a score of twenty-two, and so forth. The children agreed with the Caldecott Committee's first place choice two years of the seven years surveyed.

Part two of the study attempted to determine whether or not a relationship exists between the books and their styles and the variables of grade, reading level, race, sex and school system. The data were analyzed by the canonical correlation procedure of the SPSS package.

The first finding of the analysis was that there is a significant relationship between grade and the books selected at the .10 level of significance, but there was not a significant relationship between the other variables and the books.

When the variates were analyzed for each year, it was determined that grade level again was a significant factor in two of the seven years. Reading level was significant in three of the seven years. Race was never a significant factor in the children's picture book selection. Sex was a significant factor in five of the seven years. School system was a significant factor in four of the seven years. (Table 53)

The data summarized in Table 54 indicate the children prefer realistic pictures. In all years but one, 1984, the children selected the most realistic illustrations for the book they would like to read first. Grade level was significant for the selection of the children's first place choice in each of the seven years of the survey. Reading level was also significant for three years, sex was significant in three years, and school system was significant in two of the seven years of the study.

Conclusions

The following are conclusions based on the results of the study.

1. Children do not always select the Caldecott Award winners as their first choice.

2. There was a statistically significant relationship between grade and the books selected.

3. There was not a statistically significant relationship between reading level and the books selected.

4. There was not a statistically significant relationship between race and the books selected.

5. There was not a statistically significant relationship between sex and the books selected.

6. There was not a statistically significant relationship between school system and the books selected.

7. The year by year analyses indicate the following: (Table 53)

   a. grade level was a significant factor in two of the seven years.

   b. reading level was a significant factor in three of the seven years.

   c. race was never a significant factor.

   d. sex was a significant factor in five of the seven years and

   e. school system was a significant factor in four of the seven years.

8. The children selected the most realistic pictures in six of the seven years in the study.

Discussion of Findings

The researcher had hoped to find that the children in the study selected, as their first choice, the same books as the Caldecott Committee had selected as their winner. This proved to be true in only two of the seven years in the survey. The reason for this discrepancy seemed to be that the adults on the Committee do not use the same criteria for "picture books" as the children in the primary grades. The children in this group tend to select the most realistic illustrations for their first choices.

In the overall analysis, as well as two years in the year by year analysis, it was found that grade level was a significant factor. Assuming that grade equates with age, the older children's selection differ from the younger children. There was a significant correlation between the grades and the selection of Day in 1972 and Nona in 1976. In both these years, the children, again, selected the most realistic picture books as their first choice.

Although in the overall analysis, reading level was not a significant factor in the children's selection, it was significant in three years in the year by year analysis. Thus, the researcher assumed that even though no text was read or even seen by the children, something in the

child's ability to read makes a difference in the selection of the pictures. There was a significant correlation between reading level and the children's selection of Day in 1972 and Nona in 1976, both of which have the most realistic pictures.

The researcher was gratified that the study supported the premise that children in the primary grades were not racially biased, at least not in the selection of picture books. For example, the pictures from Ben were those of black musicians, yet there was negative support for the selection of this book by race.

In the overall analysis there was not a statistically significant relationship between sex and the selection of picture books. However, in the year by year analysis, it was a significant factor in four of the seven years. This indicated that girls and boys, at times, select picture books using their own sex as one of the criteria. Statistical significance of sex is indicated in the children's selection of the most realistic picture book in 1972, Day and in 1978, Noah.

Although there was not a statistically significant relationship between school system and book selection in the overall analysis, the year by year analysis indicated the system was significant in four of the seven years of the study. This indicates that, at times, the children's environment, such as classmates, teachers and family, may have some influence on the kind of picture books children

in the primary grades select. In 1978, there was a statistical significance between system and Worse. This was not the children's first choice. However, it was done in the same artistic style, colored full line, as the winner, Noah.

If there were no relationships between the variables, we could assume that none of them would have to be taken into consideration when teachers, librarians and/or parents select picture books for children in the primary grades. However, this study indicates that this is not the case. Grade, reading level, sex and schools system attended all influence the children's selection at some time or another. Thus, those adults who select children's books should not only depend upon prize winners, but should also look to the literature pertaining to picture book selection to determine what books the children would prefer, as described in Chapter II.

However, in further analysis, it was found that there was a statistical significance between reading level and the selection of Red in 1984. However, Red was not executed in the most realistic style. Ten, with colored painterly illustrations was the most realistic. In 1974, there was a very high correlation between sex and Cathedral, which, again was not the children's first choice. In 1982, Outside, with the most realistic illustrations had negative correlations with two variables, sex and system.

In addition, in one year, 1976, all the pictures were executed in colored, full line drawings. The children had no choice of style. Yet they overwhelmingly selected Nona as their first choice.

The above two paragraphs indicate that something other than style of picture influences the children's selection. The researcher proposes that this other variable may be that of content of the pictures. For example, for the 1984 group of books, the children could have selected Red because its content was familiar. The children could tell what the story was about, even though all the text had been covered.

Recommendations

The results of this study indicate that children do not always agree with the adult Caldecott Committee's selections of Award Winners. When given a choice of illustrations, the children prefer the most realistic pictures presented.

Media specialists should be aware that the children do not prefer the Award Winners in all cases. In order to meet the needs of children in primary grades, it should be remembered that children prefer realistic pictures. This style of illustration should be utilized in the selection of locally produced materials and the selection of commercially produced materials.

In teaching Library Science courses, we stress that not only the librarians, but the children, teachers and parents, as well, become involved with the selection of materials for the media center. This study indicates that lists of award winners do not necessarily provide the media specialists with the kinds of materials which the children in the primary grades selected as their first choices, and that attention should be given to the input from the users.

In addition to style, other factors may have influenced the children's selections. For example, the first place selection of Red in 1984 may have been due to familiarity with the story. In 1976, when all the illustrations were executed in the same style, the selection of Nona may be attributed to the content of the pictures.

Thus, it is recommended that additional research be conducted to determine if content of the pictures or familiarity with the story indicates similar statistical relationships between the children and their choices.

For this study, a comparison with the dependent and independent variables was reported. It would be well, for further research to investigate the differences between the composites of the dependent variables, for example, the differences between the selection of the boys and girls. This appears to be a limitation of this study.

Additional research may also be conducted with children, their parents, teachers and the school media spe-

cialist in one school at one grade level. The same kind of survey could be used to determine if the adults who work closely with the children are more aware of their preferences than the adults on the Caldecott Award Committee.

It is recommended that for further comparable research, the two ballot system be utilized, using only the votes where the first and second are the same by the same child. It was determined that this method, used by both this researcher and Dr. Warthman, had the most strength for statistical analysis.

APPENDIX A

A LIST OF CALDECOTT AWARD WINNERS AND RUNNERS-UP INCLUDED IN THE STUDY

1972 Award

One Fine Day
Written and illustrated by Nonny Hogrogian
New York: Macmillan, 1971

Runners-up

Hildilid's Night
Written by Cheli Duran Ryan, illustrated by Arnold Lobel
New York: Macmillan, 1971

If All the Seas Were One Sea
Written and illustrated by Janina Domanska
New York: Macmillan, 1971

Moja Means One
Written by Muriel Feelings, illustrated by Tom Feelings
New York: Dial, 1971

1974 Award

Duffy and the Devil
Written by Harve Zemach and illustrated by Margot Zemach
New York: Farrar, 1973

Runners-up

Three Jovial Huntsmen
Written and illustrated by Susan Jeffers
Scarsdale, N.Y.: Bradbury, 1973

Cathedral
Written and illustrated by David Macaulay
Boston: Houghton Mifflin, 1973

1976 Award

Why Mosquitoes Buzz In People's Ears
Written by Verna Aardema
Illustrated by Leo and Diane Dillon
New York: Dial, 1975

Runners-up

The Desert Is Theirs
Written by Byrd Baylor, illustrated by Peter Parnall
New York: Charles Scribner's Sons, 1975

Strega Nona
Retold and illustrated by Tomie de Paola
Englewood Cliffs, N.J.: Prentice-Hall, 1975

1978 Award

Noah's Ark
Illustrated by Peter Spier
Garden City, N.J.: Doubleday, 1977

Runners-up

Castle
Written and illustrated by David Macaulay
Boston: Houghton Mifflin, 1977

It Could Always Be Worse
Retold and illustrated by Margot Zemach
Garden City, N.J.: Farrar, 1977

1980 Award

Ox-Cart Man
Written by Donald Wall, illustrated by Barbara Cooney
New York: Viking, 1979

Runners-up

Ben's Trumpet
Written and illustrated by Rachel Isadora
New York: Greenwillow, 1979

The Garden of Abdul Gasazi
Written and illustrated by Chris Van Allsburg
Boston: Houghton Mifflin, 1979

The Treasure
Written and illustrated by Uri Shulevitz
Garden City, N.Y.: Farrar, 1979

1982 Award

Jumanji
Written and illustrated by Chris Van Allsburg
Boston: Houghton Mifflin, 1981

Runners-up

Where the Buffaloes Begin
Written by Olaf Baker, illustrated by Stephen Gammell
New York: Warne, 1981

On Market Street
Written by Arnold Lobel, illustrated by Anita Lobel
New York: Greenwillow, 1981

Outside Over There
Written and illustrated by Maurice Sendak
New York: Harper and Row, 1981

A Visit to William Blake's Inn
Written by Nancy Willard, illustrated by Alice and Martin Provensen
New York: Harcourt, Brace Jovanovich, 1981

1984 Award

Glorious Flight: Across the Channel and Louis Bleriot, July 25, 1909
Written and illustrated by Alice and Martin Provensen
New York: Viking, 1983

Runners-up

Ten, Nine, Eight
Written and illustrated by Molly Bang
New York: Greenwillow, 1983

Little Red Riding Hood
Retold and illustrated by Trina Schart Hyman
New York: Holiday, 1983

APPENDIX B

BALLOT USED IN PILOT STUDY

B A L L O T

Student #_____ Start at Table _____

1972 (Table 1)

A _____

B _____

C _____

D _____

1974 (Table 2)

F _____

G _____

H _____

1976 (Table 3)

I _____

J _____

K _____

1978 (Table 4)

L _____

M _____

N _____

B A L L O T 2

Student No. _____ Start at Table _____

1972 (Table 1)

1 _____

2 _____

3 _____

4 _____

1974 (Table 2)

5 _____

6 _____

7 _____

1976 (Table 3)

8 _____

9 _____

10 _____

1978 (Table 4)

11 _____

12 _____

13 _____

APPENDIX C

LETTER TO SUPERINTENDENTS OR PRINCIPALS

10520 S. Hamilton Ave.
Chicago, Illinois 60643

April 12, 1985

Superintendent
School District

Illinois

Dear

Enclosed is an explanation of the survey I hope to complete for my dissertation at Loyola University of Chicago.

I truly appreciate the interest that you and your teachers have in my project. If there are any questions concerning the process, please call me at my home (779-0362) or my office (995-2278).

Thank you for your help.

Very truly yours,

Joan K. Oksas

Joan K. Oksas
Loyola University of Chicago

INTRODUCTION TO THE STUDY

This follow up study of John Warthman's A Study of Caldecott Award Winners and Runners-up by Fourth, Fifth, and Sixth Grade Children in Selected Schools (1970) is being conducted to determine if children at grades 1, 2 and 3 select the same picture book for their first preference as compared with the Caldecott Award Committee's choice. Warthman's study covered the years 1938 through 1970 in schools in Southern Mississippi. This present study will be conducted in three South Suburban school districts close to Chicago, Illinois and will cover the years 1972, 1974, 1976, 1978, 1980, 1982, and 1984. These years include seven winners and eighteen runners-up.

METHODOLOGY

In order to preserve the anonymity of the participants, the classroom teachers will assign an identifying number to each student's ballot, the last two digits of which will indicate reading level. For example, 13646 identifies student number 136 who has a reading score of 4.6. The form will also give the race and sex.

The books will be arranged on numbered tables in a survey area. Seven students will enter the area and begin the selection process. The starting table number will be indicated on their ballots (only one student at a table at one time.) Each table will have the Caldecott winner and runners-up for one year arranged in alphabetical order. Two illustrations will have been selected from each book. The students will go to their designated tables and decide, by looking at the first illustrations, which book they would like to read first, second, third, etc. They then move to the next table and repeat the process. When they have all looked at the first pictures at all tables, the process is repeated for the second illustrations.

Thank you vary much for your cooperation in this venture.

APPENDIX D

CONSENT FORM

PROJECT TITLE: First-, Second, and Third-Grade Children's Picture Preference of Caldecott Award Winners and Runners-up 1972-1984 in Selected Schools

I, the parent or guardian of _____,
a minor _____ years of age, consent to his/her participation in a program of research being conducted by Joan K. Oksas of Loyola University of Chicago.

The student will be asked to vote on the appeal of picture books, listing 1st, 2nd, and 3rd choices. No risks or discomforts are expected to result from this selection process.

I understand that no risk is involved and that I may withdraw my child from participation at any time without prejudice.

_____
(Signature of Parent)

_____
(Date)

APPENDIX E

BALLOTS USED IN STUDY

B A L L O T

START AT TABLE _____

Student No. _____-_____-_____ Sex_____

1972 (Table 1)

A _____

B _____

C _____

D _____

1974 (Table 2)

F _____

G _____

H _____

1976 (Table 3)

I _____

J _____

K _____

1978 (Table 4)

L _____

M _____

N _____

1980 (Table 5)

O _____

P _____

Q _____

R _____

1982 (Table 6)

S _____

T _____

U _____

V _____

W _____

1984 (Table 7)

X _____

Y _____

Z _____

School _____

B A L L O T 2

START AT TABLE _____

Student No. _____-_____-_____ Sex_____

1972 (Table 1)

AA _____

BB _____

CC _____

DD _____

1974 (Table 2)

FF _____

GG _____

HH _____

1976 (Table 3)

II _____

JJ _____

KK _____

1978 (Table 4)

LL _____

MM _____

NN _____

1980 (Table 5)

OO _____

PP _____

QQ _____

RR _____

1982 (Table 6)

SS _____

TT _____

UU _____

VV _____

WW _____

1984 (Table 7)

XX _____

YY _____

ZZ _____

School _____

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APPROVAL SHEET

The dissertation submitted by Joan K. Oksas has been read and approved by the following committee:

Dr. Robert C. Cienkus, Director
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Associate Professor, Curriculum and Instruction, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

April 23, 1986
Date

Dr. Robert C. Cienkus
Director's Signature