



An investigation of children's perceptions of story content as elicited by three modes of presentation:
the storyteller, the reader, the sound slide show
by Margaret Kernan Rolando

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Education
Montana State University
© Copyright by Margaret Kernan Rolando (1984)

Abstract:

This study attempted to determine if three different modes of presenting a Story--Storyteller, book and reader, and sound slide show--represented different information potential by bringing different content to children's attention. Ninety third graders from three elementary schools in Butte, Montana, during spring 1984, were presented in small groups, with one of three presentations of the fairy tale, "The Wild Swans" and administered a paper and pencil instrument to determine their perceptions of three different types of content from the story— affective, inference and factual. This content had emerged from preliminary investigation with students and an adult panel analysis of the story text.

Since there was no existing instrument to determine children's perception of the story content, a crucial preliminary was the instrument development, which (though ancillary to the original intent of the study) became a major portion of the research. As most similar cross-media research has utilized individual presentations with followup interviews for data collection, this paper and pencil instrument, more readily amenable to statistical analysis, proved a novel approach warranting further consideration, especially with different age groups and reading levels.

Results indicated there was no statistically significant difference among the modes in affective content in the foreground of attention, number of and overall inferences and factual recall. There was, no difference in approximately eighty percent of the specific inferences. While no definite conclusions about media differences could be drawn, the research process yielded some relevant observations: there appeared more active student participation with book/ reader and sound slide presentations than with the storyteller. The format of the sound slide show illustrations may have influenced those specific questions evidencing response differences. Sound slide show and book/ reader presentations may not differ enough to elicit different perceptions, although this bears further investigation.

The following cross-media research is also suggested: further research into the development of suitable paper-pencil instruments; continued investigation into the possible differences in information potential of different media, problem solving fostered, preferences related to learning style, long-term effects, and delineation of specific media attributes.

AN INVESTIGATION OF CHILDREN'S PERCEPTIONS OF
STORY CONTENT AS ELICITED BY THREE MODES OF PRESENTATION:
THE STORYTELLER, THE READER, THE SOUND SLIDE SHOW

by

Margaret Kernan Rolando

A thesis submitted in partial fulfillment
of the requirements for the degree

of

Doctor of Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

December 1984

78
42
p-2

APPROVAL

of a thesis submitted by
Margaret Kernan Rolando

This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

Dec 18, 1984
Date

Henry Worrest
Dr. Henry Worrest
Chairperson, Graduate Committee

Approved for the Major Department

Dec 18, 1984
Date

Henry Worrest
Dr. Henry Worrest
Head, Major Department

Approved for the College of Graduate Studies

1-8-85
Date

Michael Malone
Dr. Michael Malone, Graduate Dean

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a doctoral degree at Montana State University, I agree that the Library shall make it available to borrowers under rules of the Library. I further agree that copying of this thesis is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for extensive copying or reproduction of this thesis should be referred to University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106, to whom I have granted "the exclusive right to reproduce and distribute copies of the dissertation in and from microfilm and the right to reproduce and distribute by abstract in any format."

Signature Margaret Kernan Rolando
Date December 5, 1984

ACKNOWLEDGEMENTS

I would like to express my grateful appreciation to the following people, without whose continued support and help this dissertation could not have been completed. Dr. Henry Worrest, my doctoral committee chairperson, has been a trusted advisor and constant source of encouragement since the beginning of my doctoral studies. Dr. Larry Ellerbruch has motivated me to pursue creative research and spent long hours helping with my research design and statistical analysis. Dr. Janis Bruwelheide has provided professional and personal support and encouragement in the pursuit of my goals. To these and to all the staff of the Montana State University Department of Secondary Education and Foundations and to all my committee, I am gratefully indebted.

My studies could not possibly have been undertaken and completed without the unfailing support of my family and friends to whom I will always be grateful. I especially want to thank my children, Peter and Anna, and my parents, Raphael and Mae Kernan, for their tremendous sacrifices on my behalf.

I wish also to thank Butte School District Number One, especially Curriculum Director Dr. Tim Sullivan and former superintendent Mr. Bill Milligan, for supporting me in pursuing my doctoral studies and in undertaking this research, and all the students and staff who participated in this study.

Finally, I want to thank Lee Dolan, my typist, for her consistently excellent work on this manuscript.

TABLE OF CONTENTS

	<u>Page</u>
APPROVAL.....	ii
STATEMENT OF PERMISSION TO USE.....	iii
VITA.....	iv
ACKNOWLEDGMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	ix
ABSTRACT.....	x
1. INTRODUCTION.....	1
Statement of the Problem.....	6
Need for the Study.....	7
Purpose of the Study.....	9
Questions to be Answered.....	10
General Procedures.....	11
Delimitations and Limitations.....	13
Definition of Terms.....	14
Summary.....	17
2. REVIEW OF THE LITERATURE.....	20
Introduction.....	20
Historical and Comprehensive Overview.....	21
Findings of Educational Media Research and Cross-Media Studies.....	24
Specific Attributes and Characteristics of Media.....	29
Stories, Language and Storytelling.....	37
Literary Genre - The Fairy Tale.....	42
Summary.....	44
3. PROCEDURES.....	45
Introduction.....	45
Review of the Literature.....	46
Selection of the Story.....	47
Production of the Sound Slide Show.....	49
Approaches Piloted for Analyzing the Story and Developing the Instrument.....	51
"Brainstorming" Analysis.....	51
Interview Approach.....	55

TABLE OF CONTENTS (continued)

	<u>Page</u>
Analysis and Development of Instrument from the Text.....	56
Methodology.....	59
Preparation of Story Presentation and Sound Slide Show.....	59
Story Analysis and Development of the Instrument..	59
Population and Sampling Procedures.....	61
Pilot of the Instrument.....	63
Experimental Treatment and Control for Contaminating Variables.....	65
Data Collection.....	66
Research Questions and Statistical Hypotheses.....	67
Description of Independent and Dependent Variables.....	69
Instrumentation and Analysis of the Data.....	69
Organization of Data.....	70
Pilot Data from Third Grade Classes.....	70
Pilot Data from Sixth Grade Class.....	71
Experimental Treatment Data--Part One: Affective and Nonaffective Content Choices.....	72
Experimental Treatment Data--Part Two: Inferences.....	72
Experimental Treatment Data--Part Three: Factual Recall.....	73
Permissions.....	73
Summary.....	73
Chapter 3 Endnotes.....	76
 4. STATISTICAL ANALYSIS OF DATA.....	 77
Introduction.....	77
Organization of Chapter Four.....	78
Overview of Pilot and Determination of Reliability.....	80
Third Grade Pilot Data.....	81
Part One - Affective Content.....	81
Part Two - Inferences.....	83
Part Three - Factual Recall.....	84
Pilot Data - Sixth Grade Students.....	87
Part One - Affective Content.....	88
Part Two - Inferences.....	88
Part Three - Factual Recall.....	89
Experimental Data.....	92
Overview.....	92
Part One - Affective Content.....	93
Part Two - Inferences.....	95
Part Three - Factual Recall.....	100
Summary.....	102
Chapter 4 Endnotes.....	105

TABLE OF CONTENTS (continued)

	<u>Page</u>
5. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS.....	106
Introduction.....	106
Organization.....	107
Discussion of the Piloting of the Instrument.....	108
Discussion of Affective Content in the Foreground of Attention.....	110
Discussion of Inference Questions.....	112
Discussion of Factual Content in the Foreground of Attention.....	114
Conclusions.....	115
Observations and Interpretations.....	117
Recommendations for Further Research.....	119
Educational Implications.....	121
Summary.....	123
REFERENCES CITED.....	125
APPENDICES.....	130
Appendix A - Pilot Material.....	131
Brainstormed Content.....	132
Affective Content.....	135
Content from Guided Brainstorming.....	137
Instrument Directory from Text.....	140
Instrument: Inferences about Affective Content...	144
Appendix B - Final Instrument and Story Test.....	147
Final Instrument.....	148
Story Text.....	154
Appendix C - Instructions to Treatment Group and Log...	160
Appendix D - Standardized Data on Comparable Student Groups.....	164
Appendix E - Permissions.....	166

LIST OF TABLES

<u>Table</u>	<u>Page</u>
I Third Grade Affective Content Choices Pearson r Correlation Coefficient.....	82
II Third Grade Pilot Inference Questions - Chi Square.....	85
III Third Grade Pilot Inference Questions - Chi Square with Yates' Correction.....	86
IV Third Grade Factual Recall Pearson r Correlation Coefficient.....	87
V Sixth Grade Affective Content Choices Pearson r Correlation Coefficient.....	88
VI Sixth Grade Inference Questions Pretest to Post Test - Choice "3" Omitted.....	90
VII Sixth Grade Inference Questions Pretest to Post Test - Includes Choice "3".....	91
VIII Sixth Grade Factual Recall Pearson r Correlation Coefficient.....	92
IX Affective Content Choices by Story Treatment - Descriptives.....	93
X Affective Content Choices by Story Treatment - ANOVA...	94
XI Students' t Test - Book and Reader/Storyteller Comparison x Number Affective Content Choices.....	95
XII Inference Choice to No Inference Choice by Mode.....	96
XIII Chi Square and Response Pattern - Inference Question #9.....	97
XIV Chi Square and Response Patterns - Inference Questions #9, #12, and #15.....	98
XV Reliability of Inference Questions #9, #12, and #15....	99
XVI Factual Recall by Story Treatment - Descriptives.....	101
XVII Factual Recall by Story Treatment - ANOVA.....	101
XVIII Students' t Test - Comparison x Number Correct Factual Recall Items.....	102

ABSTRACT

This study attempted to determine if three different modes of presenting a story--storyteller, book and reader, and sound slide show--represented different information potential by bringing different content to children's attention. Ninety third graders from three elementary schools in Butte, Montana, during spring 1984, were presented in small groups, with one of three presentations of the fairy tale, "The Wild Swans" and administered a paper and pencil instrument to determine their perceptions of three different types of content from the story--affective, inference and factual. This content had emerged from preliminary investigation with students and an adult panel analysis of the story text.

Since there was no existing instrument to determine children's perception of the story content, a crucial preliminary was the instrument development, which (though ancillary to the original intent of the study) became a major portion of the research. As most similar cross-media research has utilized individual presentations with follow-up interviews for data collection, this paper and pencil instrument, more readily amenable to statistical analysis, proved a novel approach warranting further consideration, especially with different age groups and reading levels.

Results indicated there was no statistically significant difference among the modes in affective content in the foreground of attention, number of and overall inferences and factual recall. There was no difference in approximately eighty percent of the specific inferences. While no definite conclusions about media differences could be drawn, the research process yielded some relevant observations: there appeared more active student participation with book/ reader and sound slide presentations than with the storyteller. The format of the sound slide show illustrations may have influenced those specific questions evidencing response differences. Sound slide show and book/ reader presentations may not differ enough to elicit different perceptions, although this bears further investigation.

The following cross-media research is also suggested: further research into the development of suitable paper-pencil instruments; continued investigation into the possible differences in information potential of different media, problem solving fostered, preferences related to learning style, long-term effects, and delineation of specific media attributes.

CHAPTER 1

INTRODUCTION

There are indeed few situations in contemporary education which do not incorporate some use of instructional media. The use of these media, whether 16 mm movies, filmstrips, television or audio recordings, is accepted as common practice in most educational endeavors.

The influence of electronic media is even more pervasive apart from formal education. As our world has been revolutionized by increasingly common electronic technologies, they have gradually come to replace many of their nonelectronic counterparts which, superficially, may have fulfilled some of the same ends. For example, the diversion and entertainment of the comic book, through the medium of print and illustration, may be being replaced by the diversion and entertainment of the televised "Saturday morning cartoons." Children were once exposed to nursery rhymes and fairy tales which are part of our oral tradition through the medium of a "storyteller," or a reader with a picture book. Often that individual was one of the child's parents. Now it is not uncommon to find a child who has had only television or movie exposure to fairy tales and folklore. Smardo and Curry (1982) have noted the wide range of presentation media, including video and audio cassettes, cable television, films and other formats, now affects even traditional story hours in public libraries: "In view of the increasing use of (these) media...systematic investigation

of the impact of these methods of story hour presentation upon children is needed" (1982:70). And in the classroom, listening with one's peers to the teacher read a chapter each day must now vie for space with "hands on" computer time and videotaped productions in the crowded school day.

The effectiveness of instructional media in the educational setting has been examined through the last three decades by considerable research. In surveying a number of studies both Schramm (1977) and Olson (1974A) have found the results to be inconclusive. Huston-Stein and Wright (1979), Salomon (1974A) and Olson (1974) have pointed out that these studies may have compared the differing technologies as technologies, rather than comparing their characteristics or the way they represent information. This latter concept was popularized by Marshall McLuhan (1964) who suggested that just as a reliance on print may have affected people's cognitive processing so also may people's basic modes of thinking and their cognitive processing be affected by the representational properties of electronic technology.

If this is the case, the distinction between media as they are used for instructional purposes and as they are used in mass communication (e.g., commercial television) may be artificial. Salomon (1979: 388) suggests that "only after one has learned about the psychological effects of unique, inherent attributes of media qua media can one ask about their utility for instruction." He contends that it is the symbolic, communicational differences of media rather than their technological differences which may make significant differences in learning.

Most media research has not addressed what aspects of the education process are more amenable to certain kinds of media (1977).

Salomon (1972A, 1979) and Olson (1974) have hypothesized that different media represent different "symbol systems," i.e., different organizations of sets of symbols which structure information differently and therefore may represent different information potential. Huston-Stein and Wright (1979) also suggest that some formal features of a medium may be viewed as representing certain mental skills or operations and that a media presentation may supplant a new skill or call upon an existing one, thereby affecting the basic thinking processes.

Researchers Huston-Stein and Wright (1979), Salomon (1979) and Meringoff (1980) have attempted to address this possibility. In comparing the kind of information children derive from different media presentations of a story, Meringoff (1980) found that those children who were presented with a television version had greater recall of actions and a greater reliance on visual content in drawing inferences about the story than did those children who were presented with a reader and picture book version. Conversely, the latter group had a greater recall of story language that eludes visual depiction and a greater use of textual content and more outside story knowledge as a basis for their inferences.

Gardner (1980) has cited research stemming from the same Project Zero research at Harvard which supported Meringoff's study in which children were similarly presented with book and reader presentations and film presentations. The findings of these studies corroborated

Meringoff's: the children exposed to the book version remembered much more of the story on their own and were better able to recall information when they were cued. The book children were also able to recall the precise wording and figures of speech, whereas the television children tended to paraphrase the verbal information. Children from both groups made inferences about the story and reached the same conclusions, but the line of reasoning they used was different: the television children were likely to depend on what they saw, rarely going beyond the visual information, whereas the book children were likely to draw on their own or real world experience in making inferences. There were also notable differences in the children's conception of time and space.

Most of the research has examined what Schramm (1977) has referred to as the "big media," e.g., instructional television, 16 mm movies, computer assisted instruction, those media which represent more sophisticated technology, and concomitantly, a greater expense to the educational consumer. There have been few studies dealing with what Schramm referred to as the "little media," e.g., filmstrips, slides, audio recordings. Yet these media are used extensively throughout education.

While there have been studies comparing attitude changes elicited by various media presentations, e.g., Croft et al. (1969), and while, as Huston-Stein and Wright (1979) have pointed out, there has been considerable research on the socializing aspects of mass media television, there have been few, if any, studies that have attempted to directly determine the effectiveness of different media in transmitting emotional or affective content.

The following, therefore, is the background upon which this study is based: different media may represent different information potential which may, with repeated, continual exposure, affect basic modes of thinking and cognitive processing. These media which transmit information may be print, television, radio, movies, filmstrips, or people. For example, both a storyteller and a reader with a picture book are examples of media possessing particular attributes through which information may be transmitted. Audiovisual media are commonplace in many educational settings and have, in some cases, replaced reliance on more traditional media such as print or live presentation. While research has attempted to determine whether or not audiovisual media is effective in teaching, there has been little research on determining what, if any, potential for psychological effect, whether on information processing, problem solving or affective responses, different media presentations might have. It is possible, as Marshall McLuhan (1964) has stated, that the medium is the message: that is, the medium through which information is conveyed may be more influential than the actual content that is transmitted. However, as Salomon (1974A:393-394) has noted, this hypothesis has received little actual investigation: "When roughly the same idea is represented in two different symbol systems, is the same meaning obtained from the messages? There are no clear research findings on this point."

Furthermore, most media research has focused on the "big media" such as movies and instructional television. There has been little on the simpler media such as filmstrips and slides. Yet these media presentations are commonplace in schools and many commercially produced

versions of stories, fairy tales and folktales are now available. For example, the Caldecott Medal books which are chosen annually as the best illustrated children's picture books published in the United States (Arbutnot and Sutherland, 1972) have been made into a sound flimstrip series by the Weston Woods Company of Weston, Connecticut. If these various media do represent different information potential, then it might be hypothesized that such different presentations might elicit qualitatively different responses from the viewers, and that different information may be being brought to the foreground of the audience's attention.

For example, both Shannon (1979) and Ross (1980) suggest that storytelling is a medium characterized by its richness in immediate participation and personal contact. It might be hypothesized that personal contact is a salient attribute characteristic of that medium, and as such, it might be an effective transmitter of affective content. The determination of such attributes and the concomitant coding of the information they transmit could be valuable to educational theory and to the practical use of the various media.

Statement of the Problem

In consideration of the preceding discussion, this researcher has investigated whether or not different kinds of content, i.e., affective versus nonaffective, number of and specific inferences, and factual content, are brought to the foreground of third grade children's attention by three media used in public school language arts and library programs--sound slide show, book and reader, and storyteller.

The types of content were operationally defined and emerged from an adult analysis of the story. Instrumentation to measure children's perceptions of salient content was developed by this researcher and verified by a regional language arts expert.

The three media represented what Schramm (1977) has characterized as the less elaborate or simpler forms of media which have received little investigative study. One of these mediums, the sound slide presentation, approximated the filmstrip version of a storybook presentation, a format now used in library and language arts programs. Additionally, the review of the literature indicated little or no research into the transmission of affective content by these media. Both practically and theoretically it was considered valuable to determine if these media forms of a story brought to the participants' attention the same type of content.

Need for the Study

The need for this study originated in the indications of media researchers such as Salomon (1974A, 1979), Olson (1979), Huston-Stein and Wright (1979), and Gardner (1980), who have suggested that media research has produced inconclusive results because it has not focused on comparing different attributes which may code information differently and represent different information potential. This study attempted to compare three media (sound slide show, book and reader, and storyteller) on the attribute of type of content each medium brings to the foreground of attention. Specific types of content included affective and nonaffective, inferences and factual content.

This study attempted to deal with rather narrow and specific aspects of a more general and theoretical problem described by Salomon (1979). He suggested that research into the educational effectiveness of media is inappropriate until the psychological effects of the characteristic attributes and representational qualities of media can be determined. This consideration would seem to be important since audio-visual media presentations are used in education and now cover the gamut of the curriculum including story and literature presentations which often transmit values and/or affective content. Furthermore, as Allen (1980) has pointed out, in spite of the use of media in the schools, actual media education, i.e., the development of media literacy skills, has actually declined.

While this study has not dealt directly with the construct of symbol systems, it has been theoretically based in part on the recognition that researchers such as Olson (1974) have stated, i.e., that educational and psychological theory are limited by the lack of a theory of the structures pervading our environment and the cognitive consequences of being exposed to those symbols and their transmitting media.

Directly related to this study was Meringoff's (1980) suggestion that if a given medium brings specific kinds of story content to the foreground of a child's attention (for example, affective or action), then with repeated exposure to that medium the child may accumulate experience with that kind of information and may come to use and prefer it to other kinds.

Ancillary to these considerations was a problem that Schramm (1977) has pointed out: there has been little research on the simpler media such as filmstrips and slides, which are nonetheless in prevalent use in education. This study has focused on three of the simpler media forms--sound slide show, book and reader, and storyteller--which may be found in education, particularly in language arts and library settings.

Additionally, this study has used two approaches to media research not used conjunctively in previous cross-media studies: the use of a paper and pencil instrument for data collection and the use of small groups of subjects for the presentations. Meringoff's study (1978), for example, used individualized presentations and an interview technique for data collection. Smardo and Curry's investigation (1982) into the effectiveness of different story hour presentations on pre-school children's receptive language has more nearly approached the kind of story setting that would be used in schools and libraries, specifically presentations made to groups of children. The feasibility of actually using groups of children in a normal school setting with a paper and pencil, readily administered instrument, has not previously been investigated.

Purpose of the Study

This study attempted to investigate whether or not there were differences in third grade children's perceptions of story content that was brought to the foreground of attention by three modes of presentation: a sound slide presentation (comparable to a filmstrip), a reader and picture book presentation, and a storyteller presentation.

The types of content included "affective" and "nonaffective" as operationally defined, emerging from an analysis of the text of the story. Instrumentation to determine which type of content was brought to the foreground of attention was developed by the researcher and has been delineated in the methodology section of Chapter Three, which describes the preliminary research that was done prior to this study.

Questions to be Answered

This study attempted to answer the following questions:

1. What are the findings of media research in the last three decades relevant to understanding the effect of media on information potential and cognitive processes?
2. Does each of these kinds of media, a sound slide presentation, a reader and picture book presentation, and a storyteller presentation, bring to the foreground of children's attention different types of content?
 - a) Do children perceive affective or nonaffective content to be salient in each of these presentations?
 - b) Do children viewing these different presentations make quantitatively and specifically the same inferences about content in the story?
 - c) Is children's recall of factual content the same for each type of presentation?

General Procedures

The following general procedures were used in this study:

1. The researcher conducted a review of the research relevant to understanding the effect of different forms of media on information potential. Interdisciplinary research, specifically on children's language development and the structural significance of stories, also was included. This background was used in developing the theory, justification and research design for this study.
2. The fairy tale, The Wild Swans, illustrated by Susan Jeffers and retold by Amy Ehrlich (Andersen, 1981), was selected for this study on the criteria of genre, suitability for storytelling, comparability, quality of the illustration, size of the book, and authenticity of the material.
3. A sound slide presentation of the book, narrated by the storyteller and using one hundred nine 35 mm slides, selected on their representation of the story line and authenticity in portraying the illustrations of the book, was developed by the researcher.
4. During the fall of 1982, the researcher piloted three approaches to analyzing the story to delineate the content and develop an instrument which would provide a measure for the research questions. These approaches are described in Chapter Three. On the basis of this piloting, one approach, a content analysis and development of the instrument directly from the text, was selected for use in this study.

5. The text of the story was submitted to a panel of three public school language arts and/or English teachers for analysis of affective and nonaffective content in the story text.
6. A three-part instrument was developed by the writer. The first part consisted of questions about the type of content in the foreground of attention. The second part consisted of inference questions about the story. The third part contained factual recall content. The instrument was submitted to a regional expert in the language arts field to authenticate the construct validity of the operationally defined content and the overall face validity of the instrument.
7. The storyteller selected for the two live presentations and for narrating the sound slide show was chosen because of her experience in drama and theater groups, her experience in working with children and her interest in and enthusiasm for the study and storytelling experiences.
8. The instrument was piloted with two third grade classes and one sixth grade class from a school not used in the actual study to determine the instrument's reliability (stability).
9. Three schools from the nine elementary schools in the Butte School District Number One were determined comparable on the basis of standardized achievement scores. From each of the three schools, a random sample of thirty third graders was selected. The students were randomly assigned to one of the three modes of presentation. There were ten in each

- group with equal numbers of boys and girls, except in one school in which there were only fourteen third grade boys.
10. The presentations were made to the groups in the spring of 1984. Conditions for presentation were kept as similar as practicable given the actual school settings.
 11. The instrument was administered immediately following the presentations.
 12. The results obtained were analyzed and reported in this study.
 13. All proper authorizations and permissions were obtained before the study was actually begun.

Delimitations and Limitations

This study was restricted in the following ways:

1. A majority of the sources for the review of the literature was obtained from the Renne Library at Montana State University. Additional sources were obtained through interlibrary loan services and a personal library.
2. Ability to draw generalizations from the findings was restricted by the population that was sampled for the study. Such restrictions are appropriate and inherent to exploratory research. Future research with other population groups would be recommended for increasing the generality of such findings.
3. While an attempt was made to choose a suitable story for presentation, the study was nonetheless limited by that selection.

4. The study was limited by the storyteller's interpretation of the story and the inherent variability in communicating that interpretation.
5. While a serious attempt was made to produce a slide show of comparable quality to the other presentations, the different natures of the media precluded exact comparisons.
6. The study was limited to the types of content that were operationally defined and that were rated in the instrumentation.
7. While an attempt was made to control for contaminating variables during the presentations, the use of the actual school setting and the nature of the delivery systems and the subjects precluded complete control of all unforeseen variables.

Definition of Terms

Certain terms were considered in the following context:

Action Content. (operational def.) A phrase, sentence or clause containing an action verb.

Affective. Pertaining to or resulting from emotions or feelings (The American Heritage Dictionary, s.v. "affective").

Affective Content. (operational def.) A phrase, sentence or clause, explicitly stating an emotional reaction (e.g., was horrified) or stating an action that is directly associated with emotional reaction (e.g., "she wept").

Audiovisual Media. Nonprint instructional materials designed to teach through visual and/or auditory means (Davies, 1974: 461).

Brainstorming. A method of shared problem solving in which all members of a group spontaneously contribute ideas (The American Heritage Dictionary, s.v. "brainstorming").

Cognition. The act or process of knowing in the broadest sense (Webster's Third New International Dictionary, Unabridged, s.v. "cognition").

Cognitive. Of, relating to, being, or involving cognition (Webster's Third New International Dictionary, Unabridged, s.v. "cognitive").

Descriptive Content. (operational def.) A phrase, sentence or clause that depicts, describes, without emphasizing action or emotion; phrases that help draw a clearer "mental picture," e.g., metaphor, simile.

Formal Attributes. A characteristic pertaining to the form as opposed to the content of a specific medium; also relating to the form in which information is coded in that specific medium (Huston-Stein and Wright, 1979:23).

Genre. A literary type or class. Works are sometimes classified by subject...but the more usual classification is by form and treatment (Literary Terms: A Dictionary, s.v.

"genre"). Instructional Media. Print and nonprint materials designed to teach and/or accomplish educational objectives.

Mass Media. The instruments of communication that reach large numbers of people at once with a common message, such as magazines, television, radio (Davies, 1974:464).

Medium, pl. media. A vehicle for conveying information; an agent for communicating ideas (Davies, 1974:464).

Nonaffective Content. (operational def.) A phrase, sentence or clause that does not explicitly state an emotional reaction or an action directly associated with emotional reaction. In this study, there were two subcategories of operationally defined, nonaffective content: action and descriptive.

Operational Definition. "The concepts used...should be defined through a sufficiently accurate description of the procedures used by the investigator in establishing and testing them" (Encyclopedia of Psychology, s.v. "operational definition").

Reliability. The extent to which individual differences are measured consistently as determined by coefficients of stability, that is, the correlation of a set of measurements with themselves over a specified time period (Sax, 1980:630).

Symbol System. A set of symbols organized to form a system of interrelated options that correlate with a field of reference, such as language, music, numbers. The difference in the structure of information in these systems may be discussed in terms of information potential which may be transmitted through various media (Olson, 1974:12, 13).

Theme. (operational def). A phrase, sentence or clause that expresses what the story is about, its main point, what it is trying to tell about life.

Validity. The extent to which measurements or items correspond with criteria. In this case, the extent to which measurements support the existence of an hypothesized trait or ability (Sax, 1980:634).

Summary

Media research in the last three decades has yielded inconclusive results, yet the use of audiovisual media in educational settings is extensive. Researchers Salomon (1974A, 1979), Olson (1974), Huston-Stein and Wright (1979), Meringoff (1980), and Gardner (1980), have pointed to a need for studies which identify the attributes and specific characteristics peculiar to the various media. These attributes, which code and transmit information, may affect the thinking processes and information coding of people continually exposed to a particular medium. As Marshall McLuhan hypothesized (1964), the medium through which the information is transmitted may be more influential than the actual message or content itself.

Little research has been conducted on what Schramm (1977) termed the "little media," for example, slides, filmstrips, audio recordings. Yet, these smaller and less expensive media are in common use in education. A filmstrip version of a story, fairy tale or folktale may replace or supplement the teacher or librarian telling the story or reading it aloud. Many of these stories intended for younger children transmit attitudinal and affective content which, hypothetically, might be altered by the medium through which it is conveyed.

The purpose of this study was to investigate whether or not there were differences in third grade children's perceptions of story content

that was brought to the foreground of attention by three modes or presentation: a sound slide presentation, a reader and picture book presentation, and a storyteller presentation. The latter two have been characterized by the personal contact and immediacy of the storyteller's or reader's presence. It was hypothesized that each medium could bring different types of content to the foreground of the children's attention and that this could be reflected in their perceptions of salient content.

The subjects for the study were a sample of third grade students drawn from Butte School District Number One during the 1983-84 school year. A sound slide version of the chosen story was produced using the illustrations from the book and the voice of the storyteller/reader. The story was presented to small groups of the subjects and their perceptions of salient content identified with a researcher designed instrument. The findings of the research have been reported in this study.

The limitations inherent in the nature of the study itself included the choice of the story, the storyteller/reader's interpretation of that story, the inherent variability in conveying that interpretation, and variability resulting from using real school settings. Additionally, while a rigorous effort was made to produce a slide presentation of comparable quality to the storyteller and the reader presentations, the natures of the media precluded exact comparisons. The study was limited further by the types of content that were rated in the instrumentation.

Generalizations from the study were restricted by the fact that the sample was drawn from third grade students from a specific school population.

The following terms, relevant to this study, were defined: action, affective, affective content, audiovisual media, brainstorming, cognition, cognitive, descriptive content, formal attributes, genre, instructional media, mass media, medium (p. media), nonaffective content, operational definition, reliability, symbol system, theme, and validity.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

A review of the literature relevant to this study revealed the following: considerable research has been done on audiovisual media, focusing on both general and educational considerations, and these studies have generally yielded inconsistent and inconclusive results. Current media research has focused on specific attributes and characteristics of media, and cross-media comparisons are now being undertaken to delineate the specific dimensions along which media may differ.

Research specifically on storytelling or picture book presentations and types of story hour experiences has only recently begun; while there is considerable research on children's conceptualizations of stories and their use of language, little of this research has direct bearing on this study.

Consequently, this review is organized as follows. Audiovisual media research is treated first. This topic has been subdivided into three general categories: an historical and comprehensive overview of the research and of media education; findings of educational media research and cross-media studies; and research on the specific attributes and characteristics of media, especially as these attributes may

relate to cognitive processes and mental skills necessary to extract information from presentations.

The reader will find considerable overlap among these categories. However, they have been grouped together in an attempt to provide a cogent theoretical background upon which this research has been based. Since there was a paucity of articles that were genuine antecedents to this study, it was necessary to build this theoretical basis on related research and interdisciplinary concerns.

The latter part of this review of the literature addresses the research and theoretical concerns related to the use of stories, language and storytelling and the literary genre of the fairy tale.

Historical and Comprehensive Overview

Although a few studies of various media antedate the 1950's, most media research has been conducted in the last three decades. Huston-Stein and Wright (1979), in discussing television, have noted that research has shifted from the medium of television to the content of television: during the 1950's the research focused on the medium itself; during the 1960's research was concerned with television as a socializing agent, especially as it related to violence; in the 1970's other socializing aspects, such as the negative effect of advertising and stereotypes, were examined. The authors suggest that new research examine the forms of the medium rather than its content, an idea first popularized in the 1960's by Marshall McLuhan (1964) who suggested that formal properties of audiovisual media might have profound effects on the basic modes of thinking and cognitive processing.

Gardner (1980), who has also noted that the studies which have been done on television have failed to tell us about the medium per se, has proposed the following reasons for this deficiency in the research. First, much initial television research made use of methodology applicable to older forms of media. Second, television research has been practically rather than theoretically oriented because of society's concern with violence, commercials, and so on. Third, since almost everyone in this country has a television set, no valid comparison can be made between people who have televisions and those who don't.

One way media research can be categorized is according to purpose, specifically, media as a form of mass communication and media as an instructional tool used to achieve some educational objective. However, one current researcher indicated that this may be an inappropriate distinction: "Only after one has learned about the psychological effects of unique, inherent attributes of media qua media can one ask about their utility for instruction" (Salomon 1974:388).

Olson and Bruner (1974) have also theorized that such distinctions may be inappropriate: they have noted that education has assumed that knowledge was central to the educational enterprise and independent of both the form of experience from which the knowledge was derived and the goals for which it was used. They have theorized that different forms of experience may yield nonequivalences, not so much in the knowledge acquired but in the skills involved in extracting or utilizing that knowledge: "Instructional means converge as to the knowledge conveyed but they diverge as to the skills they assume and develop" (Olson and Bruner, 1974:149).

Schramm (1977) has reviewed and evaluated research in media according to the type of delivery system, e.g., instructional television, programmed learning, slides, radio. He has noted that the bulk of the research has been done on what he terms "big media," for example, television and computer assisted instruction. Primarily, studies have been conducted on instructional television. There have been far fewer on the "little media," e.g., slides, filmstrips, radio, records. Schramm has also noted a doctoral dissertation by D. W. Stickell at Pennsylvania State University in 1963 which pointed to the questionableness of the experimental design of many media studies. Of 250 experimental comparison studies (classroom instruction compared with television instruction), Stickwell was able to find only ten studies which he termed fully interpretable, meaning that they had met every requirement of a rather demanding standard.

Finally, Allen (1980) has noted that media education, popular in the late 1960's and early 1970's and attributable in part to the influence of Marshall McLuhan, has largely disappeared from public school curricula. McLuhan's Center for Culture and Technology at the University of Toronto was closed in 1980. The return to basics in education movement reinforced the concept that mass media detracts from basic literacy skills. Media education, affiliated with the arts and humanities and interdisciplinary by its nature, has lost its credibility as public concern about diminished basic skills has led to a more compartmentalized and structured curriculum. Allen (1980) has noted that a role of education has been to provide students with the skills required to process and utilize information to their best advantage, and that

in an age of mass media and electronic communication, media literacy ought still to be considered an important skill.

As a counterpoint to this view of media education, Morrow (1979) has indicated that media education lost its impetus because McLuhan's theories were deterministic and negativistic in their view of human potential as being subject to the medium itself and because little research existed to substantiate any of the claims about media.

Findings of Educational Media Research and Cross-Media Studies

Authors who have reviewed research relevant to education have arrived at different conclusions. Moldstad (1974) stated that studies have largely compared relative student learning outcomes when methods incorporating instructional technology have been evaluated against traditional methods. In reviewing some thirty studies covering various forms of media, he concluded the following: significantly greater learning results when media is integrated with traditional instructional methods; equal amounts of learning are accomplished in less time when instructional technology is incorporated; multimedia instructional programs based on a systems approach often facilitate more effective student learning than traditional instruction; and students usually prefer multimedia and/or audio-tutorial instructional programs when compared to traditional instruction. The reader should be cautioned, however, that the title, "Selective Review of Research Studies Showing Media Effectiveness," indicates that articles for inclusion in the review may have been chosen because they did show the effectiveness of media.

Schramm (1977) has concluded that research shows media can teach effectively. Most of the research has been done on what he terms "big media," primarily instructional television. Few studies have dealt with simple media. In spite of the fact that instructional television can teach effectively, Schramm stated that there is no basis in the research for saying that students do learn more or less from television than from classroom teaching. Furthermore, review of the research shows that the better the design the less likely the chance of finding significant or consistent differences when comparing learning from audiovisual media to learning from another instructional method. These comparative studies have contributed little to a theory of media. Thus, Schramm concluded that learning is more affected by what is delivered than by the delivery system itself.

In the introduction to the Seventy Third Yearbook of the National Society for the Study of Education entitled, Media and Symbols: The Forms of Expression, Communication and Education, editor Olson (1974) stated that surveys of the research which compare different treatments such as film versus print versus live teachers overwhelmingly showed no significant difference. He indicated the impact of educational technologies is either negligible or perhaps unknown since we don't know how to assess the psychological effects of the technologies or how to adapt them to educational purposes. Olson (1974:9) also stated that research, both educational and psychological,

is severely limited by the absence of a theory of the structure of the symbols that make up such an important part of our environment, the media that propagate those symbols, and the cognitive consequences of exposing children to them.

Salomon (1978) has summarized the media research as indicating the following: all media can instruct. Media may be interchangeable unless critical attributes are emphasized. And, media are composed of different, distinctive elements, each element being a source of possible variation. Salomon has also emphasized that it is essential to get a deeper understanding of the components of media and how these operate under different conditions to develop theories of media in education.

In looking at different mental skills that are necessary to extract information from presentations, there exists much research which compares children's developmental language abilities, i.e., reading as opposed to listening skills. For example, Durrell (1969) found that listening vocabulary is greater than reading vocabulary at all lower grade levels. By fifth grade reading comprehension reaches ninety percent of listening comprehension and by eighth grade the two abilities are equal. While studies such as these are not real cross-media investigations, they do indicate the need to differentiate the cognitive skills required to process information.

Paris and Mahoney (1974) have investigated children's derivation and retention of meaning from pictures and from sentences. In their study, they presented the same relationships either verbally or pictorially. Their results indicated that fourth grade children could correctly verify more assertions about pictorially than orally presented information.

More specific to cross-media comparisons, Jerome Bruner (1964) has theorized that in young children's cognitive development, learning and

