

Cultivating Visual and Print Literacy with Picture Books

by

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Abstract

Picture books are one of the most popular forms of books among young children. They provide hours of enjoyment, excitement, anticipation and relaxation through the stories and images readily available to young, soon-to-be readers. The artworks in picture books can provide a very rich experience to young students that are beneficial on multiple dimensions. As students learn to question, scrutinize, decode symbols, problem-solve, and communicate their ideas, they engage in both visual and print literacy practice. This thesis focuses primarily on visual literacy as it relates to print literacy development. I will argue that as students practice visual literacy they also develop a basis for print literacy and build a solid foundation for further reading development.

The development of visual literacy cannot be quantified, nor can one remove all visual aspects from one's life in order to scientifically study its effects. Therefore, because of the nature of visual literacy, this paper focuses on the overlapping relationships that exist between visual literacy and print literacy development. Many of the overlaps include processes that are challenging to pinpoint and define such as knowledge, understanding and language. This results in a philosophical and theoretical discussion concerning the development of a literacy foundation based on communication, comprehension, coding, motivation, experience, reading strategies and transfer.

This paper concludes with a critical analysis of current approaches to teaching visual literacy as it relates to print literacy development in today's classrooms. Strategies for teachers are provided, from choosing picture books and illustrations, to structuring the discussions and engaging the students. A suggested approach is also provided, along with a sample plan and discussion questions for teachers of primary students to use and adapt to suit their own classroom needs.

Keywords: Literacy, Visual Art, Reading and Writing, Visual Literacy, Picture Books, Language Art

Dedication

This paper is dedicated to my family.

To Bryan for his unconditional love, support, understanding and patience.

Also to my children, Teagan, Trystan and Taryn for their boundless creativity,
exuberance and excitement.

And forever to Sophia Graham for her endless inspiration.

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Table of Contents

Approval.....	ii
Partial Copyright Licence	iii
Abstract.....	iv
Dedication.....	v
Acknowledgements.....	vi
Table of Contents.....	vii
List of Figures.....	x
Introlmage: Visual Literacy Wordle.....	xii
Chapter 1: Introduction.....	1
Visualizations in Our Society	7
An Introduction to Visual Literacy	8
A Definition of Visual Literacy	8
The Importance of Visual Literacy	12
A Brief History of Visual Literacy.....	14
An Introduction to Reading.....	17
A Definition of Reading.....	17
The Components of a Reading Foundation	18
Building a Foundation.....	20
Picture Books: The Ideal Medium	21
Picture books: A Unique Genre.....	23
Chapter 2: A Philosophical Background	28
Language.....	28
The Language of Art.....	32
The Language of Picture Book Art.....	38
The Ineffable, Concrete and Abstract.....	41
The Whole.....	44
Understanding & Language.....	47
Knowledge	51
A Road to Literacy.....	53
Chapter 3: Enriching a Reading Foundation Through Visual Literacy	55
Research Challenges.....	55
A Literacy Foundation	58
1. Language and Communication	59
A means of communication.....	59
Language and Visual Art.....	60
Memory	69
Learning Through Art: A Guggenheim Study.....	70
2. Decoding and encoding.....	71
The Scribble Hypothesis	75
3. Comprehension	78
A Formal Analysis of Artwork	81
4. Motivation, Aesthetics & Emotion	82

5. Experience with literacy in use.....	84
6. Strategies of “Good” Readers	85
8. Story Structure	87
Transfer.....	88
Familiarity.....	88
Transferring Skills: Visual Literacy to Print Literacy	89
VTS and The Transfer Theory: A Study by Abigail Housen	91
Visual Art Instruction, Reading and Transfer: A Study by Burger and Winner	93
Marketing Research	95
Interarts Analogies	96
Conclusions	101
Chapter 4: Approaches to Developing Visual Literacy.....	102
Abigail Housen and Philip Yenawine: Visual Thinking Strategies (VTS)	102
The Eric Carle Museum: Visual Thinking Strategies (VTS) and the Whole Book	
Approach (WBA)	105
Analyzing Illustrations in Picture Books	107
Richards and Anderson: See, Think, Wonder (STW).....	110
The Guggenheim Museum: Learning Through Art (LTA).....	113
The Fitzwilliam Museum: FitzKits (DIY)	115
A Review of the Approaches	118
Chapter 5: A Suggested Approach	120
Choosing Specific Illustrations.....	120
Capturing Interest.....	121
Likeability	123
Aesthetics.....	124
Other Aspects to Consider.....	126
Structuring the Discussion.....	127
Developing the Questions.....	130
Kalantzis and Cope on Meaning	131
Sample Questions.....	132
Concrete Questions.....	133
Artistic Questions	133
Literary Questions	134
Conclusions.....	134
Engaging the Students	135
A Sample Plan and Discussion	137
Choosing a Picture Book.....	137
Choosing the Illustrations	138
Forming the Discussion Questions	140
The Discussion.....	148
Conclusions	164

References.....	166
Appendices.....	176

List of Figures

Figure 1: IntrolImage: Visual Literacy Wordle.....	xii
Figure 2: <i>Morning Star</i> , by J Camwell.....	33
Figure 3: <i>Evening Star</i> , by Christopher Jackson.....	33
Figure 4: <i>Four Apples</i> , by Paul Cezanne (1880).....	43
Figure 5: <i>Dominant Curve</i> , by Wassily Kandinsky (1936).....	43
Figure 6: <i>Blue</i> , by C. Read.....	49
Figure 7: <i>Happy Snail</i> , by Trystan, age 4.....	61
Figure 8: <i>Flamingos</i> , by Teagan, age 6.....	62
Figure 9: <i>The Gingerbread Man</i> , by Malachi, age 3.....	64
Figure 10: <i>The Gingerbread Man</i> , by Shayla, age 4.....	64
Figure 11: <i>Verbal Language and Understanding</i> , by C. Read.....	66
Figure 12: <i>Humongous Whale</i> , by Taryn, age 2.....	68
Figure 13: <i>Pictographic Writing System</i> , by S. Olsen (1992, p. 129).....	72
Figure 14: <i>Egyptian Hieroglyphics</i> , by Barry (1997, p. 112).....	72
Figure 15: <i>Doggy</i> , by Taryn, age 2.....	77
Figure 16: <i>Venus and Adonis</i> , by Titian (1553-4).....	97
Figure 17: <i>Slavers Throwing Overboard the Dead and Dying</i> , by Turner (1840).....	98
Figure 18: <i>Ma Jolie</i> , by Picasso (1911/12).....	99
Figure 19: <i>The Test Your Metal Kit</i> , The Fitzwilliam Museum, Cambridge, UK.....	116

Figure 20: <i>The Story Started Kit</i> , The Fitzwilliam Museum, Cambridge, UK.....	116
Figure 21: <i>The Doodle Box Kit</i> , The Fitzwilliam Museum, Cambridge, UK.....	116
Figure 22: <i>Advertisement: Mao</i>	122
Figure 23: <i>Advertisement: Hitler</i>	122
Figure 24: <i>Advertisement: Lenin</i>	122
Figure 25: <i>The Birthday Party</i> , Discussion Image #3.....	151
Figure 26: <i>The Birthday Party</i> , by Teagan, age 6.....	163

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Chapter 1: Introduction

When I was a child my two passions were visual arts and reading. I remember before I could read the words in books I would sit and examine the pictures. Page after page, I vividly remember examining the various hues used in each book, the different styles of illustration, and the various characters that were used. Although I didn't know the proper terminology or understand how to create the images or the media involved, I noticed that some books had ink drawings in them, while others had oil paintings or watercolor paintings, and others even had some pictures created out of plastercine. Some had lots of detail while others were vague and general. I wondered why some were in colors and others were black and white. Later on, learning how to read the text came easily to me but even then I continued to savour the pictures in addition to the text.

While half of my spare time was devoted to reading, the other half was devoted to creating visual art. Drawing, painting, photography, ceramics, papier-mâché – it didn't matter what medium it was; as long as I was creating something I was happy. I remember creating pictures with stones and twigs along the reservoir near my house, painting with food coloring on cakes and cookies, and creating papier-mâché sculptures. I often combined my two favorite hobbies and wrote and illustrated my own books. Although they were often simple books with the similar plot lines of traveling through tunnels and discovering ghosts and skeletons, they were always fun to create and they amused my family.

Now as I watch my own three-year-old read books and create her own artwork I wonder if and how these two activities are linked. We began our adventure into reading with simple picture books, ones with lots of pictures and few words. I didn't choose these books because of their lack of written text, but because they had rich illustrations. Books we could look at, talk about, and discover new things in the pages each time we picked them up. They were books with bright illustrations and lots of detail, ones that we would both find appealing, such as those written by Eric Carle, Maurice Sendak and Arleen Alda. They were also books that I remember reading as a child. Sitting in our comfy chair, looking at beautiful artwork in books and sharing the same excitement and anticipation of turning the pages that I remembered as a child, was enjoyable and at the

time I hoped it was somehow educational. Now that I look back and reflect on the process, I know that I was actually helping her develop and practice visual literacy abilities. I began to wonder if this process played a role in helping both of us learn how to read.

Thinking about and discussing artwork is rich and multifaceted, but does this mirror the complexity of reading print? Although they are both forms of communication and meaning making, exploring and comparing the processes involved in each task is very challenging. As Snow (1998) explains, text can be thought of as language written down. Therefore, understanding text involves understanding a verbal language, something seemingly very different from visual art. Moreover, the comparison is made more challenging by the fact that verbal and visual communication can function entirely independently or conjointly. For example, a story can be told or read without the use of visual pictures and still be understood, or a painting can provide information to the viewer without the use of text or someone talking about it. However, someone may choose to verbally explain directions and draw a map to fully explain the route, or a picture book may provide some information in the illustrations and other information in the text in order to create a dynamic and memorable story. The method of communication depends on many factors such as the preferences of those communicating (a very shy person may always prefer to communicate by email instead of face to face), the intended receiver (perhaps the receiver cannot read and therefore will not understand a message via email), the message that needs to be transmitted (a poem may help one explain a particular feeling) , time necessary to communicate the information (an urgent message can be sent quickly via a telephone conversation instead of a mailed letter), and even the available materials (a cell phone may be available instead of a computer).

Examining verbal and visual means of communication is further complicated by the types of information that can be conveyed. Verbal language, either spoken or written, serves many functions. Jakobson (1960) describes the functions of language which include, but are not limited to, acting in a referential or informative manner such as when language is used to describe something or provide information, or serving an expressive or affective function such as when sound denotes the speaker's internal state. It can also serve a conative function to direct other people, act ceremonially or

ritualistically such as in wedding ceremonies, act in a metalingual way such as when language is used to talk about language, or even work phatically such as when language is used for the sake of interaction, also referred to as “elevator talk”. Visual means of communication can also serve many functions, many of which overlap with verbal language. For example, visual images can also serve conative functions, such as traffic signs directing people to stop or yield. Visual communication can also act ceremonially or ritualistically. Vancouver Island’s Nuuchaanulth paint and use ceremonial curtains that enhance and validate various ceremonies such as namings, marriages, and mournings. Like verbal communication, visual communication can also be representational or expressive. For example, I can say or write the words *American Cocker Spaniel* and those familiar with cocker spaniels will understand that the words represent a small black dog with a white chest and floppy ears. A painting of an American Cocker Spaniel is representational as it shows, or in other words, represents a black cocker spaniel. Yet this painting can also be considered to be expressive, as the artist’s style may also be considered in the painting. Many abstract paintings that do not represent concrete objects but rather show a feeling or a notion may also be considered as being expressive. Instead of using auditory sound to reveal one’s emotions as in verbal language, the artist’s style can depict emotion and expression. Representation and expression form an important and dynamic relationship in both forms of communication as they express concrete and abstract ideas using concrete and abstract communication techniques.

Many of the terms used when discussing verbal and visual literacy are elusive, interdependent and difficult to define. Many concepts are difficult to grasp and manipulate because of their vagueness. For example, words and phrases such as “knowledge”, “understanding language” and “the language of art” are used. However, defining these words and phrases is difficult. For example what is meant by “understanding” and “knowledge” and how does one know when they are attained? What is a “language”? Is visual art a language? Underlying questions such as these must be addressed before visual literacy and print literacy can be explored.

Despite the complexities outlined above, I began to wonder whether or not practicing visual literacy, especially through the use of picture books, could directly help students learn how to read. However, due to the nature of the underlying questions in

this study, a solid proof cannot ethically be determined, if at all. In order to study whether or not visual literacy affects reading acquisition all visual stimuli, not just interactions with picture books, would have to be removed from a group of children for a long period of time. Their ability to learn how to read would need to be compared with that of a group of children who have practiced visual literacy. Removing all forms of visual literacy would be an impossible task, as visual literacy can be practiced in many different ways such as reading books and magazines, watching television, and even seeing advertisements on posters and bulletin boards. Even if a study like this were to be conducted, it would still be difficult to prove a causal relationship between visual literacy and the ability to learn how to read. Knowledge and learning processes cannot be measured or compared in a concrete manner partly because they are abstract and partly because of the indeterminate relation between the two language forms.

Even though a causal relationship cannot be determined, exploring the concepts and processes involved in visual and print literacy and the way they overlap is important and valuable. As a result, this paper is not a traditional scientific study that proves that practicing visual literacy directly influences reading abilities, but instead is a careful examination and exploration of the interrelationships that exist between visual and textual literacy. Connections and similarities exist among different ways of communicating, including through text and images. When examining artwork in picture books, the reader uses elements such as line, shape, color, space, tension and movement to interpret actions, recognize objects, and understand the layers of meaning, symbols and metaphor, allowing stories to emerge. Emotions are embedded along with information, triggering a full range of expression. This paper examines these processes and highlights how they are similar to those used in reading print. Abstract processes such as comprehension and understanding are defined and explored as they relate to both print literacy and visual literacy. Overlaps between communication processes such as verbal language and the language of art and the ideas of representation, expression, concrete and abstract are explored. The roles of personal drivers that are important when learning how to read, such as motivation and experience, are also examined as they relate to both print and visual literacy. Finally, specific strategies that are used in both visual and print literacy processes are compared and examined. These include making personal connections, asking questions, visualizing, making inference, detecting

sequence, determining main ideas, reaching conclusions, making judgements and decoding and encoding information. Furthermore, this paper examines how these processes can be learned and practiced during visual experiences and the possibility of their transfer to print literacy. Overall this results in a critical, exploratory study that questions and examines the interrelationships among language, visual, verbal and print literacy.

I approach my exploration from the many roles that I play; a student constantly reading, learning and expressing ideas; an educator teaching children and adults how to read, write and express themselves; an artist creating multimedia artwork for myself and others; and a parent encouraging my own children to explore and learn new concepts. As such, I use my own artwork and the artwork of children I know as examples in this paper. It should be noted that these drawings and paintings were created before this paper was written. These are pictures that children created on their own accord, free to use any media and in any style. I believe that they are typical drawings of children their age. As for the inclusion of my own paintings in this study, some may believe that a bias may exist. However, I do not judge them or myself as superior or inferior to others, the images are simply examples various aspects and relationships that can be found in images. Moreover, I am able to highlight certain thoughts and ideas that I considered as I created the images, which is not easy to accomplish when using the artwork of artists that I do not know or are unable to contact.

Chapter 1 introduces the reader to the broad ideas that underpin this thesis. Definitions of visual literacy and reading are provided. The importance of visual literacy is investigated and an outline of the research that has been conducted in this rather limited field is also provided. The reader is also introduced to the concepts that form a foundation for literacy. Finally, picture books, serving as a visual arts vehicle, are introduced as a way to teach visual literacy concepts in order to build a literacy foundation by building on the work on Lawrence Sipe (1998), Evelyn Arzipe (2003) and Morag Styles (2003).

Chapter 2 serves as a philosophical discussion and exploration concerning language, knowledge and understanding as these terms relate to visual art and reading. This chapter sets the stage for the remainder of the paper by highlighting important

terms, underlying concepts and their relationships. I draw on theories from numerous theorists including, but not limited to, philosophers John Dewey (1933, 1934) and Ludwig Wittgenstein (1974, 2001), aestheticians Suzanne Langer (1977) and Ernest Gombrich (1960), and language theorists Charles Osgood (1971) and John Watson (1913), and educators Bette Goldstone (1989), Joan Isenberg (2001) and Mary Jalongo (2001) to paint a framework which I later build upon to draw resemblances between visual and print literacy.

Chapter 3 examines how developing and practicing visual literacy parallels learning and improving print literacy. I build upon research by language art and visual art educators Adrienne Gear (2006), Bob Steele (1998, 2008), Rhoda Kellogg (1973) and Susan Sheridan (2002, 2005), English specialist Perry Nodelman (1988), psychologists Howard Gardner (1993) and Allan Paivio (1971), and visual literacy expert and VTS founder Abigail Housen (2002, 2007). The thought processes, languages and understandings that are exercised while practicing visual literacy correspond to each aspect needed in creating a strong foundation for reading. This chapter builds upon chapter 2 by detailing the research that has been conducted, drawing parallels and highlighting the possible transfer that may occur between the two processes.

Chapter 4 outlines methods that have been developed to teach visual literacy. Some of the teaching approaches include Visual Thinking Strategies, the Whole Book Approach, See Think Wonder, Learning Through Art, and a Do-It-Yourself approach for non-educators. While several educators and researchers have developed methods to teach visual literacy, I have not discovered any programs that use visual literacy as a means to ready children for reading. Therefore, this chapter evaluates the programs with respect to their ability to provide opportunities for children to practice processes required in reading while practicing visual literacy.

This leads to Chapter 5, which outlines a visual literacy teaching approach designed to optimize the creation of a print literacy foundation. I conclude with a sample teacher-student discussion based on the proposed methodology and highlight the experiences necessary to create a solid print literacy foundation. By exploring the relationships between visual and print literacy this paper shows how practicing visual literacy can provide experiences that overlap with print literacy, encouraging students to

gain familiarity with forms of language and communication, decoding and encoding, meaning-making and problem-solving that underlie both literacy processes. Not only does this aid students in interpreting the images and print in the picture book at hand, but also provides experiences that enrich one's print literacy foundation, thus encouraging transfer among literacy domains.

Visualizations in Our Society

Looking at objects and making sense of them is one of the first things people do. John Berger (2003) opens his book *Ways of Seeing* with the statement "seeing comes before words. The child looks and recognizes before it can speak" (p. 7). This is, without doubt, something that occurs before learning how to read. Although a basic and primary activity, looking at visualizations can be powerful, lasting and affect memory much faster than text. For example, according to marketing researcher Erik DuPlessis (2001), it takes only three seconds for a durable memory trace to be formed when looking at a print advertisement, making it highly likely that a memory trace for the visual is formed before the text has even been processed. Given the primary and almost instantaneous nature of visualizations, it is no wonder our society is becoming increasingly visual in nature. Our younger generation may not write formally in an email or letters such as letters to the editor in local newspapers very often. Instead they may opt to post a video on the newspaper's website or on youtube.

Coping and communicating in our ever-changing and visual environment is important, but visual literacy goes beyond this idea. Visual literacy is important for many other reasons. First, it can aid in recall because visualizations can aid in conveying and understanding content in a memorable way. Visualizations can also provide an overview of information that easily synthesizes and organizes detail into a coherent whole. Visual literacy can help foster the understanding and learning of new ideas by highlighting relationships. Fourth, it can aid in the discovery of new insights by highlighting patterns. The ability to communicate and understand visualizations can also convey and trigger emotional responses. Finally, visual literacy can also be used to coordinate people and ideas while providing common points of reference.

According to Martin Eppler, Remo Burkhard, Ralph Lengler & Patricia Klarner (2011), visual literacy course designers at the University of Geneva, visualizations can be structured into seven groups: sketches, diagrams, images, maps, interactive computer based visualizations, objects, and stories and mental visualizations. Examples of these visualizations can be found in appendix A. Sketches represent the first group and are used a great deal by architects and urban planners to communicate ideas and visions. They illustrate important features and support the artists' reasoning and arguments. Diagrams convey relationships and simplify information using predefined graphic formats that can make abstract information accessible. Images, the third category, can take many forms such as a painting, photograph, or computer rendering, and are representations, expressions, impressions or realistic elements. Maps are created with a specific purpose to show relationships in a structured format, both in detail and as an overview, in a global context. Interactive visualizations are computer-based and allow users to work with the information and collaborate with others to explore complex information. Objects represent the sixth category, which are composed of 3-dimensional visualizations. These physical models help to explore spatial relationships and overviews of the information. The final category consists of stories and mental visualizations, which are imaginary in nature and occur through envisioning information.

An Introduction to Visual Literacy

A Definition of Visual Literacy

There are many different types of literacy that persist in today's society. This is exemplified by the popular term "multiliteracy" which refers to the many ways people communicate, such as through verbal language, technology and multimedia. This is exemplified further by the Reggio Emilia approach to teaching where students are considered to have many languages, or ways of showing their knowledge, such as drawing, writing, sculpture and dramatic play (Edwards, Gandini & Forman, 2011). Visual literacy is only one sliver of the many types of literacies that currently exist.

The term “visual literacy” gained popularity in the 1960’s, and yet it remains a vague, open term. As Braden (1996) explains, one of the major impediments to research on visual literacy is the fact that there is “a lack of a widely accepted definition of the term visual literacy itself” (p. 491). In 1989 Judy Baca (1990) conducted an extensive study and listed one hundred and eighty six accepted constructs of visual literacy. Even as recent as 2007 a common definition of visual literacy has been absent. According to Avgerinou and Ericson (1997), many have tried to write a definition, but have been unable to arrive at a consensus. In 2007 researchers Jennifer Brill, Dohun Kim and Dr. Robert Branch studied the definition of visual literacy and attempted to construct an operational and mutually agreed-upon definition by those working in the field. A questionnaire was developed and distributed to people with visual literacy expertise such as authors from the *Journal of Visual Literacy*, authors from visual literacy based conferences, and authors of books from the visual literacy domain. The results from the study were very disappointing as the number of participants who completed the questionnaire was so low that it left the researchers questioning whether or not a community of visual literacy scholars actually exists. Needless to say, a comprehensive, agreed-upon definition was not developed.

Many different definitions exist that are unclear and nonfunctional, often referring to anything delivered through visual sensory perception. The term is used in many different fields, such as in fine art, education, business, cartography, technology, science and media studies. Moreover, the general term “visual literacy” is often used to refer to specific aspects such as visual languages, visual thinking, visual learning, mental imagery, abstraction, cultural interactions, symbol systems and coding. Just examining the different types of visualizations as outlined above provides an insight into the different ways one can think about and define visual literacy. For example, visual literacy in the field of cartography usually refers to being able to interpret and understand maps. Interactive computer based illustrations are valuable in the business world and being adept in visual literacy sometimes refers to the ability to use technology to create presentations that are visually appealing, are not crowded with information, use colors that can easily be seen, and avoid using too many moving elements that can be distracting. Creating and reading diagrams is important in many scientific fields and being visually literate sometimes refers to being able to create clear diagrams to

communicate specific information. It is also a term that is used often in media studies to refer to the ability to understand images that people are constantly being bombarded with on television and in magazines. In this case, to be visually literate means to be able to discern what is real versus fabricated and being able to “read between the lines” in commercials and advertisements. In other words it is the ability to understand that what is shown in advertisements can be skewed as information is often left out in order to make viewers believe one product or method is superior to another.

In the field of fine art, which forms the basis of my perspective, visual literacy often refers to being able to understand, or interpret, visual images including ones found in books, magazines or art galleries. These images may stand alone, act in a sequence, or accompany text or extra information. Wileman (1993) defines visual literacy as “the ability to ‘read,’ interpret, and understand information presented in pictorial or graphic images” (p. 114). Such images can be found almost anywhere. However, interpreting and understanding art images is a complex process. First, visual literacy in art involves observation skills. Viewers must notice visual signifiers and then realize the importance of them. Interpretation skills are required in order to interpret the signifiers by using information through observations. This involves examining compositional elements such as color, shape and texture and recognizing how the viewer responds to, makes judgments about, and understands how these elements come together to make meaning and tell stories. Finally, analytical skills are required to draw conclusions about the aims of the creator and develop personal opinions concerning the artwork.

“Visual thinking” is another term that is often associated with visual literacy within the fine art discipline. Just as reading and writing are two sides of the same coin, there are two sides of visual literacy. Understanding images is one side, and creating images for others to view and interpret is the other side. Ralph Wileman (1993) describes visual thinking as “the ability to turn information of all types into pictures, graphics, or forms that help communicate the information” (p. 114). This describes the creative side of visual literacy.

It is important to note that visual literacy is culturally specific (Stokes, 2001). Different cultures have differing views, values and uses of the visual arts. Obviously, this creates different relationships among the arts, communication, language and

literacy. For example, many people in North America tend to associate peace and joy with the color green and natural landscapes and sterility with man-made structures (Nodelman, 1988). This influences the way artwork is viewed and interpreted, including artwork in picture books. Nodelman (1988) provides the example of Max's bedroom in Sendak's *Where The Wild Things Are* and explains that "the reason we see Max's bedroom as bleak is because of our cultural values that are ingrained in us and the lush greenery imply idealized paradise" (p. 111). People with different backgrounds and experiences might not interpret this image the same way.

Other cultures have different uses for visual arts which affects the way they communicate. For example, aboriginal nations from the Pacific Northwest Coast often use the arts as a direct means of communication. They use elaborate woodcarving techniques in creating totem poles that represent Native family kinships and stories. Since First Nations people had no written language of their own, the poles and meaning of the symbols were shared orally with close friends and relatives, thus creating an important relationship between oral language and visual art. In this way, the First Nations were, and some continue to be, visually literate directly through their artwork. However, these symbols are culturally specific; not everyone can look at a totem pole and understand the family story behind it. Specific visual literacy ideas and skills need to be learned and applied properly in order to fully understand the totem pole. Although examining different cultures and the varying interrelationships that lie between visual literacy, communication, language and literacy would be very interesting, in order to limit the scope of this paper varying cultural perspectives on visual and print literacy will not be reviewed.

Heinich, Molenda, Russell and Smaldino (1999) have combined both the viewing and the creating sides of visual literacy in their definition, "the learned ability to interpret visual messages accurately and to create such messages" (p. 64). Overall this is the most suitable definition for my purposes in this paper. However, the term "accurately" remains an issue. If a person is viewing an artwork such as a painting, how can he or she be sure to interpret the work accurately? Not everyone interprets the same visual image in the same way. In addition, although the term "messages" is accurate for a global audience, it is too broad for my purposes. One could discover "messages" anywhere. Just as some people can look at a refrigerator and call it a work of art, others

can look at almost anything and discover a message in it, whether it is a television commercial, a movie, a painting, or even the shape of a car. Like other visual literacy researchers, I found that I needed to create my own definition of visual literacy. Since I am examining visual literacy from a fine arts perspective, and even more specifically, the visual arts, I shall adopt a definition that focuses on visual art. Since I believe “messages” is too broad, I will replace it with the terms ideas, feelings and concepts, which are more distinct. Therefore I have adopted the definition of visual literacy as “the learned ability to interpret visual artwork and to create such artwork in order to communicate ideas, feelings and concepts”.

The Importance of Visual Literacy

Many schools teach the importance of reading and writing skills, most specifically decoding (recognizing letters and words) and comprehension (understanding the meaning behind the words) of the printed page. Although images are often used in combination with text and presented to young learners, I have found that specific in-depth approaches to looking at, analyzing and understanding the images are often skimmed over quickly or neglected altogether.

However, outside of school, much of students’ attention is devoted to visual images as visual communication strategies become more popular. As more and more information and entertainment are conveyed through non-print media such as television, movies and the internet, the ability to think critically and visually about the images presented becomes significant.

Perhaps it is because images are so prevalent outside of school that educators do not focus on them inside school. Moreover, since people can automatically see objects, it might be thought that visual literacy comes naturally; if a young child can see objects then he or she should be able to learn how to interpret and understand them naturally as well. However this ability does not develop automatically as the student matures and develops cognitively. The higher order thinking skills that are involved in visual interpretation such as analyzing, classifying, and synthesizing need to be taught, practiced and developed to reach the highest potential. Moreover, according to Goldstone (1989), the teaching of visual interpretation is not superfluous; rather it is “an

integral part of the communication process of literacy acquisition and a skill that promotes creative and analytic thinking” (p. 592). Visual literacy needs to be taught in order for it to be understood and used to its potential.

According to numerous cognitive researchers including Suzanne Stokes (2003) and Allan Paivio (1971), visual literacy precedes verbal and print literacy in human development. In other words, people learn how to interpret what is seen before learning to use a verbal language or read and write. People tend to learn by moving from simple to complex, concrete to symbolic ideas, as illustrated in Piaget’s well known model of cognitive development which shows how children’s cognitive processes move from understanding concrete objects in the sensorimotor stage to continuously more abstract and symbolic processes in the preoperational stage through the concrete operational and formal operational stages. Similar stages can also be observed when one learns how to communicate verbally. Dr. Charity Rowland (2004) at the Oregon Health & Science University developed a communication matrix that outlines seven stages of learning how to communicate. Children begin with pre-intentional behaviors as an infant where communication is beyond the individual’s control and reflects his or her general state of being. Communication gradually changes to conventional communication where individuals use pre-symbolic forms of communication such as waving, pointing or nodding and then use concrete symbols like making a buzzing sound to represent a bee. Finally abstract symbol usage (such as using single words) develops and then individuals reach the final stage of full language usage.

Similar stages are also found in learning how to create and interpret artwork. Viktor Lowenfeld (1978) and Herbert Read (1966) outline stages of drawing (Appendix B). While they each use different terminology to identify the stages, both show how children move from a scribbling stage of creating abstract and sometimes unintentional marks to creating intentional representational attempts (pre-schematic), to attempts to draw realistically, to the use of symbolism and story-telling in their artwork. Susan Sheridan (2005) and Rhoda Kellogg (1973) outline even more specific stages of drawing, beginning from a child’s abstract scribbles to representational drawing. This is explored further in chapter 3. Students follow a similar path when learning how to interpret artwork. I remember following Feldman’s (1973) model of art criticism throughout my schooling, and I know numerous teachers who continue to follow this

technique today. Feldman's (1973) method takes viewers through four stages: description, analysis, interpretation and evaluation. Students are led from simple decoding to literal comprehension, then to meaning development and critical comprehension, similarly to deciphering textual passages.

By combining these ideas, namely that visual literacy precedes verbal and print literacy, that visual literacy includes creating and interpreting images, which in turn is the visual equivalent to writing and reading text, and that the developmental stages in image creation and interpretation correspond to the stages in verbal and textual communication, one can begin to see the relationships between visual and print literacy. Given the similarities, one can see the importance of visual literacy and how it could take a leading role in the formation of a foundation for reading.

A Brief History of Visual Literacy

The idea of visual literacy blossomed in the 1960's with the work of John Debes who was one of the first to use the term and develop a working definition. Before Debes, ideas concerning visual literacy, though not the term, were considered, such as with Chomsky's (1957) work on syntactic structures and Wendt's (1962) work on the language of pictures. References to visual literacy can be also found in the work by Colin Turbayne (1970) who stated, "just as a large part of learning to understand words consists in learning how to respond to them, so is it the case in learning how to see" (p. 125). Although Turbayne was not directly referring to visual literacy, his ideas concerning a visual language are directly applicable to visual literacy and his theories are often considered to be a foundation for visual literacy such as in work by Barley (1971), Fransecky and Debes (1972) and Flory (1978).

As already mentioned the term "visual literacy" appears in multiple fields and has been addressed from various viewpoints. Without a specific "visual literacy" field and definition, however, research into its specifics can be challenging. Moreover, since it is a rather broad topic, visual literacy research tends to be specific to the larger discipline investigated and viewpoint of the researcher. Therefore, although there are quite a number of articles on visual literacy available, I found that very few exist that focus on how development in visual literacy developed through visual art instruction influences

development in print literacy. In addition, some of the existing articles have misleading titles. For example, from the title of the article “Visual Literacy: Intermediality: How the Use of Multiple Media Enhances Learning” by Diane Lapp, James Flood and Douglas Fisher (1999), one could assume that the article would consider how visual literacy enhances learning and perhaps outline the possible outcomes of using visual literacy in a classroom setting. However, the article simply outlines the activities that a particular student participates in throughout a Language Arts unit on a day by day basis and concludes by briefly reviewing two studies that show that children who read a novel and watch the corresponding video can provide more detailed answers to questions on a test than those who only read the novel. Specific visual literacy education was not addressed, such as how to watch the video critically and analyze what they saw. Moreover, the question of *how* visual literacy or multiple media usage enhances learning remains to be answered.

When researching visual literacy, art and reading, one of the most important facets to examine is the connection between verbal and visual communication systems. There are three disciplines that have contributed to the majority of research in the visual literacy field that examine verbal and visual languages together. These include linguistics, the arts, and psychology.

Allan Paivio (1971), a psychologist and professor at the University of Western Ontario, contributed a great deal to the field with his theories regarding coding, symbol systems, language and communication. His most well-known contribution is his dual-coding theory, which states that verbal and image systems are connected in that people can use language and images to understand, describe, and communicate ideas and the two systems may overlap in the processing of information.

Linguist Charles Freyes (1952) explained that words could have multiple meanings based on their placement in a sentence and the intention of the writer. Meaning is found only after an analysis of the elements and the structure. Freyes (1952) explained “one cannot speak or understand a language without ‘knowing’ its grammar” (p. 57). Others used these ideas and applied them to creating visual artwork and formed the base for visual literacy (Hortin, 1994). Further research in linguistics shows the similarities between verbal and visual language (Hortin, 1994).

In the field of visual art, Rudolph Arnheim (1968, 1969) explored perception and argued that seeing is a cognitive activity where each person can create his or her own meaning from what is seen. It is not a simple stimulus-response activity. Arnheim provides the example of a circle drawn on a piece of paper and explains that it is “a particular thing in itself (concrete) but serves as a generality (abstract) when it represents the roundness of faces, balls, apples, and celestial spheres” (Arnheim, 1968). These ideas brought attention to perception and the importance of visual thinking in learning.

The field of education has not provided a great deal of research directly into the field of visual literacy. However, a few researchers and educators have provided some information regarding visual literacy and reading from a pedagogical perspective. For example, Mulcahy and Samuels (1987) have explored the use of illustrations in textbooks over the last 300 years. They highlight the importance of having the correct illustrations in the right places correlating to the text, which has implications for textbook design, but do not provide insights regarding how development in visual literacy could impact development in reading. Willows (1978) studied the effects of pictures with text with respect to reading speed and Haber and Haber (1981) studied how images impact the reading process. While these studies are close to the understanding I am seeking, they do not delve deeply enough into the relationship between the two processes. Moreover, I am unable to comment on the quality of the research due to limited information. Jane Doonan (1993), examines visual literacy in her book *Looking at Pictures in Picturebooks* without actually using the term visual literacy. While Doonan is a researcher in the field of English, this book can easily be applied to the field of education because it outlines the ways children can examine picture books. Her approach is organized, logical, and provides insight into picture books, but it does not directly relate visual literacy and reading. The most well-known visual literacy advocate in the field of education is Abigail Housen who has conducted numerous in-depth studies concerning visual literacy and has developed an approach to teaching visual literacy. While Housen’s research is extensive and includes a study on the transfer of visual literacy, she does not directly study the relationship between visual literacy and reading. Overall, while some research hints at a possible correlation between visual literacy development and reading development, I did not discover research that directly

examines and proves how practicing visual literacy could impact future reading development.

Since conducting my own research with children is very difficult and almost impossible to conduct ethically as previously mentioned, this paper incorporates a literature review where I attempt to examine and highlight relationships that may exist between visual literacy and print literacy. Since visual literacy research has been conducted within different fields, various angles toward the relationship are examined and questioned throughout this exploratory paper.

An Introduction to Reading

A Definition of Reading

What is reading? What is the reading process? What happens when we learn to read? While many people can read, the process of learning how to read is not completely understood. What happens in the brain when one suddenly realizes that the word “apple”, whether spoken or written, actually *means* an apple? It is the moment when “the light goes on” and one figures out that objects have names, and these names can be spoken or written.

When I asked my class of university students, all aspiring teachers, to define the word reading, almost all of them responded with a definition that revolved around deciphering text written on a page. A few students mentioned reading in its broad sense, encompassing verbal and nonverbal signs, such as when we talk about reading into one’s verbal message by reacting to various tones or reading body language. Reading images is also often considered in the realm of the visual arts, such as with Gombrich’s (1960) exploration of reading meaning in images. Webster’s dictionary (2012) defines the verb to *read* primarily as “to receive or take in the sense of (as letters or symbols) especially by sight or touch”, secondarily to “interpret the meaning or significance of”, thirdly to “recognize or interpret as if by reading” and fourthly “to attribute a meaning”. Combining these definitions provides a unified, all-encompassing and much broader definition; interpreting, perceiving and creating meaning from experience. Donald L. Cleland (1968), head of the Reading Lab at the University of

Pittsburgh, similarly defines reading as “the cognitive act of perceiving and ordering our immediate environment” (p. 29) and discusses how this includes perceiving our environment in meaningful ways.

From a behaviorists point of view language acquisition is considered to be a learned behavior. For example, John Watson’s (1913) classic explanation of language was in terms of observable acts that could be described by stimulus-response sequences. Charles Osgood (1971) explains it through perception, such as the sight of a nipple becoming a perceptual sign for food. Therefore we learn to read objects before we learn how to read text, thus returning to the need for a broad definition of reading as perception of meaning in experience. As Rudolph Arnheim (1969) explains, “visual perception is visual thinking” (p 14). Visual thinking is a term used often in the field of visual literacy and is associated with creating and using images. Therefore, using this definition of reading emphasizes the commonalities between reading printed text and visual literacy development.

The Components of a Reading Foundation

Learning how to read is a very complex process. Fortunately for most adults reading is an unconscious activity that has developed over time to become a seamless skill. However, for young children, learning how to read can be a daunting and challenging task that is anything but seamless. There are many factors that influence when and how one learns to read. In addition, there are many different theories and methods designed to teach children how to read such as phonics and whole word approaches, using word walls, reader’s theatre, and various games. It must be noted that this paper does not examine how to teach children to read. There are many approaches to teaching children how to read and I do not recommend one over another. Instead, I outline the base that one would most likely find beneficial in order to ease learning the symbolic processes of reading and writing and explore how visual literacy may contribute to this foundation that serves as a springboard for reading.

Before learning how to read, children need to acquire a foundation upon which they can build their skills. This is vital, as reading requires many various skills such as knowing how to hold a book, being able to pay attention to details, and recognizing,

interpreting and understanding symbols. According to Catherine Snow (2004), learning how to read depends on developed language structures, meaning that children must understand language to some degree and how it functions before they can grasp reading. Oral language is a key area of literacy development in early childhood (Isenberg & Jalongo, 2001). Children need to grasp the idea that oral language skills, including speaking and listening, are used to convey thoughts, feelings and ideas. Language can be used to communicate, has various forms and functions, is used in purposeful interactions, and can even be played with (Isenberg & Jalongo, 2001). Once children have a grasp of language they can begin to understand that written text is language written down. Interestingly, it must be noted that children do not need to excel in their written and spoken language ability; children only need average language skills in order to develop the ability to read (Snow, 1998). The ability to recognize the alphabet, distinguishing a general shape from a letter of the alphabet, is another factor. For example, a person who is not familiar with Chinese most likely will not be able to discern which images are letters and which ones are decorative shapes. With exposure to the images, over time, we can discern which ones are letters and which ones are shapes.

In addition to language skills, children need experience with literacy in use. This includes watching others read text including books, magazines, signs and symbols. This helps children learn how printed text works, which includes understanding that print contains a meaning, the differences between upper and lower case letters, left to right print orientation, top-to-bottom directionality, the usage of punctuation marks, and even how to hold a book (McDonald and Fisher, 2006).

Although there are many factors that influence learning how to read, the act of reading is composed of two main processes, decoding and comprehension (Wolfe & Nevills, 2004). This means that children need to comprehend that images can represent additional abstract information that is much deeper than the image itself. For example, a triangle can be understood as being a simple triangular shape, or one can look beyond the shape and decode it as a symbol to yield. Similarly, letters are not just shapes; various combinations of letters, words and sentences need to be decoded and understood. Children should be ready and willing to decode symbols and comprehend their meaning before they can begin to read. The abstract nature of the symbols can

make this a challenging task. Therefore, motivation is another factor that is often overlooked. If children have no desire to learn to read, forcing them could only result in frustration. Ideally young students should be excited and willing to learn how to read.

It is also important to examine the skills that existing readers use to help them become proficient. According to Adrienne Gear (2006), proficient readers make connections with the text, ask questions, visualize, infer information not directly included in the text and use the text to transform their thinking. A strong print literacy foundation should include practicing these skills ahead of time so that they come naturally when needed.

Finally, I believe students should also be introduced to the basics of story structure such as characters and setting to aid overall reading comprehension. Other activities, such as sequencing, determining main ideas, drawing conclusions, understanding cause and effect and making judgments also come into play when making sense of a text. While these skills are not required in a basic word-by-word decoding session, they are helpful when making sense of a text in its entirety.

Building a Foundation

Which type of visualization should be used when improving visual literacy skills with a final goal of building a foundation for reading? First, we must remember that the audience will be young students who have very limited reading skills or who cannot read at all and this will be their first formal introduction to visual literacy. Maps, diagrams and interactive visualizations can be difficult to understand due to their complexity and often require the ability to read. While young children can use their imaginations and visualize stories in their minds, these mental images are unique to each individual and young children may find discussing them in detail difficult due to limited vocabulary. This leaves three-dimensional objects, sketches, and images. While any of these can be used quite easily with young students, images, specifically the visual arts, are the easiest and most accessible form. These representations of expressions, impressions or realistic elements tend to be more complete than sketches and offer a great deal of potential analysis for students of all ages. While objects can also fall under the category of visual art, they are strictly three-dimensional by definition. In addition, these objects

could be large and nonportable and thus be limiting in nature. However, images can be created from objects, such as a photograph of an object. This results in a two-dimensional image of a three-dimensional object, allowing for portability and analysis. Therefore for my purposes I have chosen to focus on the visual arts in a two-dimensional form.

Picture Books: The Ideal Medium

Overall an artwork is the embodiment of an individual's idea in a material in which coherent and aesthetic relationships have communicative impact. The process of manipulating the ideas and materials together allow the elements to merge into a form that is comprehensive, integrated, and aesthetically coherent (Barkan, 1955). There are many forms of visual art and countless ways to teach visual art, some of which require some level of expertise or are costly. Some teachers may find learning how to use a new media sufficiently to teach to others a daunting task. Others may not understand or feel comfortable enough with the visual arts to discuss and critique what they see.

Images in the educational program should be varied so that students can experience different types of visual artwork. They should also be appropriate, interest the children and be relevant, perhaps by tying into a classroom theme or ideas previously presented to the class. Some teachers may find this task challenging because they lack experience with visual arts, thus choosing artwork for students daunting. With so many visual artists and images available, where does a teacher with limited experience in visual art begin, especially when many schools do not have original artwork or even good quality reproductions readily available? Borrowing artwork can be challenging and visiting local galleries and museums on a regular basis is a lot of work to organize and can be costly. So, how can teachers provide visual artwork to students?

Picture books are a suitable medium for embracing visual literacy for the purposes of developing a literacy foundation. Sipe (1998) has found that students actively create meaning as they read picture books, as they cycle through examining the illustration, then read the text and examine the image again. This process simultaneously provides visual and print literacy practice. Although some believe that picture books are of little value and are simply a collection of pictures, a well-crafted picture book is truly much more. According to Barbara Bader (1976), a picture book is

“text, illustrations, total design; an item of manufacture and a commercial product; a social, cultural, historical document; and foremost an experience for a child. As an art form it hinges on the interdependence of pictures and words, on the simultaneous display of two facing pages, and on the drama of the turning page” (Bader, 1976, p. 1). When examined closely, one will find that picture books are a superb method of storytelling that relies on two levels of communication, namely, text and artwork. In addition, according to Jalongo (2000), picture books tend to provide valuable experiences to readers. They hold readers’ attention through powerful, vivid illustrations, they accommodate developmental differences of individual children, they provide pleasure with intellectually stimulating context, they provoke conversation by aiding to increase children's vocabulary, and they connect experiences from home and family to stories.

Some may question how picture books promote literacy if they contain few or no words at all. However, books with minimal text can still communicate vivid stories, ideas and even traditions to their readers. In addition, picture books help children learn how books work and are a stimulating way to introduce books to children. They are often inviting and easily capture children’s attention. They teach children important pre-literacy skills, such as how to hold books, how to move from left to right, page turning skills, and even “reading” the title, author, and page numbers. These are all important skills that are often forgotten.

In my experience, I have found picture books to be better embraced by the public than visual art. Perhaps this is because picture books are, in fact, books and people can relate them easily to reading and writing which are highly valued skills. Picture books are a form of art in themselves, and they often provide inspiring works of visual art for everyone to enjoy and appreciate. They provide visual art to children without the label of being “visual art”.

In addition, picture books are a very accessible means of artwork in that they are readily available at schools and libraries, and everyone can look at them and can understand them to some degree. They are often used in early elementary classrooms where the majority of students cannot read very well or can read at a very basic level. According to Rosemary Agoglia (2008), education specialist at the Eric Carle Museum,

picture books have become an integral part of the educational system in that they are a “key factor in the development of early literacy: being read to from a very early age is one of the best predictors of later academic success” and that they are used “extensively in the literature-based whole language approach to verbal literacy” (para. 2). Moreover most young students are already familiar with these types of books.

Picture books: A Unique Genre

Picture books are an engaging and enjoyable form of literature. The combination of beautiful illustrations and captivating texts form an impressionable experience that often lasts throughout one’s lifetime. I can still remember all of the words to *Where the Wild Things Are* by Maurice Sendak (1963) and imagining what I would do with my own three wishes like in Richard Scarry’s (1975) *Animal Nursery Tales*.

Picture books are unique in that they contain illustrations and text, and both work together in order to create a whole book and tell a unified story. While picture books, beginning reader, and illustrated books all include text and illustrations, each functions differently. Beginning reader books contain illustrations that explicitly portray what is written in the text. For example, a text could read, “Cinderella wore a glass slipper” and the illustration could show Cinderella wearing a slipper made of glass. Therefore, if the student does not understand the word “glass”, he or she could look at the picture and see what kind of slipper Cinderella is wearing. In this case the illustration is a direct representation of the text. In an illustrated book, the illustrations are usually sporadic and supplement the text. Unlike beginning reader books, illustrated books are generally written for an older audience and are usually in the form of chapter books. Illustrated books tend to have only a few pictures that support the text, but are usually relatively unnecessary. For example, in *The Secret Garden* (Burnett, 1911) the text stands alone and the images are not crucial to our understanding of the story. Picture books are different because both the text and the illustrations provide vital information to the reader. The text and the illustrations work together to help the reader fully understand the story while providing the reader with a complete reading experience.

It is more than the high proportion of visual information and low proportion of text that defines a picture book – it is the relationship of the words and pictures. A careful balance exists between the illustrations and the text and since each form provides

different information, neither is fully complete without the other. There is a triangular relationship at play and is what Jane Doonan (1993) calls “the composite text”, meaning the merging of the visual and verbal to create a joint meaning in the reader’s mind (p. 9). In fact, four different forms of information provide different depths of information to the reader. This involves what is told to the reader through the words, what is conveyed through images, what is conveyed through a combination of the two forms, as well as the reader’s personal association with the book. Both the pictures and the words are needed to complete the story.

The text and the illustrations in picture books form a relationship that doesn’t exist in other types of books. The relationship can be one of symmetry, where the illustrations closely relate to the text and also found in beginning reader books, one of augmentation, where the illustrations enhance or augment the text, or one of contradiction, where the illustrations are contrary to the text. The last relationship creates a unique tension, often providing an incomparable element of interest. Wolfenbarger & Sipe (2007) explain that “in a picture book, words and pictures never tell exactly the same story. It is this dissonance that catches the reader’s attention... Satisfying picture books create a playing field where the reader explores and experiments with relationships between words and the pictures” (p 274).

When children learn to read they make arbitrary connections between words and the objects and concepts the words refer to. Louise Rosenblatt (1978) describes this experience as a “live circuit” between the reader and text. She explains that the reader “infuses intellectual and emotional meanings into the pattern of verbal symbols and these symbols channel his thoughts and feelings,” and out of this process emerges a “more or less organized imaginative experience” (p. 25). Bettina Kummerling-Meibauer (1999) further explains the importance of the relationship between reader and text that exist in picture books. She explains that “visual discovery, isolation of things, and the disruption of traditional context lead to transformation and demand higher cognitive awareness on behalf of the viewer... the pictures change the meaning of the words” (p 22). In fact, many successful picture books, such as *Rosie’s Walk* by Pat Hutchins and *Where the Wild Things Are* by Maurice Sendak, have noticeably fragmentary images and texts. These differences influence the effect and the meaning of the book as a whole.

The difference in information provided by the text and the images is often referred to as gaps. These gaps help draw in the reader and allow the reader to complete the information and story by combining the two forms of storytelling with his or her own experiences. This key feature of picture books encourages readers to continually look at the words and pictures in the book. As Arzipe and Styles (2003) point out, “looking (at artwork) is not easy...most visitors (in an art gallery) do little more than glance at a work of art” (p. 44). Sipe (1998) carefully outlines a theory of transmediation where readers continually reinterpret the text and images as they move through the picture book. Readers oscillate between adjusting interpretations of the text and images as their meanings shift. This means that readers do more than simply glance at an illustration in a picture book; readers continually review and look at the images over and over, looking at various symbols, meanings and variations. Moreover, this process can also aid in developing language skills, one of the components needed to develop a strong print literacy foundation as earlier outlined by the research of Catherine Snow (2004). The gaps can encourage children to use expressive language as they use visual literacy and knowledge of story sequence to become the author of the story (Owocki, 2001). According to Perkins, Arizpe and Styles (2003), text is processed and interpreted differently depending on the available images. This is very important when the text does not contain all of the relevant information such as when a “semantic gradient” exists between the text and image. In other words, sentences may contain semantic gaps, which can only be completed by examining the illustration. For example, sometimes the reader can complete his or her understanding of ambiguous words such as “he” or “it” by examining the illustrations in the picture book.

Authors and illustrators can develop “gaps” through numerous ways, not just by using ambiguous words. For example, images can provide clues to what might happen next in a story, such as Max hitting the dog with a fork in *Where the Wild Things Are* (Sendak, 1963). The reader sees what Max will do, yet the text does not mention exactly what kind of mischief Max is getting into. Illustrations can also provide the reader with additional information that the main character does not know about, such as when Rosie the hen does not know about the fox following her in *Rosie’s Walk* (Hutchins, 1971). Illustrations can even show a character doing something opposite of what the text says, such as in *Slobcat* (Geraghty, 2012) when the text describes a lazy

cat but the readers see him rescuing kittens, stealing fish and chasing burglars. These unique “gaps” that exist in picture books help to create interest and drive the reader forward through the book, encouraging the reader to alternate attention between looking at the illustrations and reading the text, reinterpreting each as new information is provided (Sipe, 1998).

The gaps that exist in picture books are an example of how the controls that are placed on emergent reader books do not necessarily apply to picture books. In addition, the design of picture books is not meant solely to support text comprehension, as with beginning reader books. Another example can easily be seen with Maurice Sendak’s *The Little Bear* series (1957-1968), which are beginning reader books. His illustrations in these books use a great deal of white space, the illustrations are carefully placed on each page and directly support the text. This contrasts with his picture book, *Where the Wild Things Are*, where the illustrations do not fully support or directly reflect the text.

Picture book illustrations provide multiple levels of meaning creating rich experiences that can stimulate visual literacy in ways that stand alone artworks cannot. The first is the meaning that comes from the representation that the picture literally conveys. The second is through the organization of the pictures. Certain arrangements and viewpoints, combined with what is and what is not shown, encourage viewers to infer certain content. The viewer constructs meaning from a series of images that have been organized by someone else. What the viewer brings to the images also affects what and how the images are interpreted. For example, a different interpretive thinking mode will be utilized if the viewer accepts the organization of the images as a natural order of things than if the viewer presumes symbolic content is hidden in the images. According to Sinatra (1986), if the viewer assumes a deeper meaning in the image, then more complex thinking will take place.

Moreover, the visual whole created in picture books is created by an arrangement of pictures, juxtaposed by theme and content to supply an overall continuous thread of meaning. Thought and language are stimulated through individual pictures. Connectedness and relationships are sought after and expressed through written and verbal formats. The thread that connects the images throughout a picture book is inferred while the words and phrases used to connect the sentences are explicit.

To continue with Sendak's work, the book *Where The Wild Things Are* (1963) provides an excellent example of the interplay between the minimal text and illustrations. Information is provided in the illustrations that are not in the text, and information is provided in the text that is not in the illustrations. The text and the illustrations work together to create a well-rounded experience for the reader. For example, the illustrations show just what kind of mischief Max is perpetrating and exactly what his wolf suit looks like. The words tell the reader that all of this happened at night and that the human figure is a boy named Max (the illustration is ambiguous if it is a boy or girl) (Sipe, Frey & Fisher, 2008). The reader creates a personal association with the book as he or she fills in the gaps that are deliberately left for the reader. For example, Max says "I'll eat you up!" and then he was sent to bed without supper. The text and the illustrations do not tell the reader exactly what his mom said to him. It is up to the reader to imagine the words his mom said to him. This helps the reader create personal associations with the book. These different levels of information help to create a complete and unforgettable picture book experience.

Overall the sparks that are created between the text, illustrations and the reader create a unique reading encounter that readers cannot experience in other types of books. It is what makes picture books unique and is precisely why picture books are an ideal avenue to use when developing visual literacy among children.

Chapter 2: A Philosophical Background

This chapter explores the broad underlying concepts that form the basis of the relationships between visual and print literacy. By examining definitions, functions, relevance, possibilities and limitations of terms such as language, the ineffable, the importance and effect of the whole, understanding, knowledge, concrete ideas and communication, and abstract ideas and communication, parallels and overlaps between visual literacy and print literacy are explored and highlighted.

Language

This paper focuses on the parallels between visual and print literacy and how practice in visual literacy may help to develop a strong foundation needed for subsequent success with print literacy. However, before this can be explored in detail, certain terms need to be addressed. As an educator, I use terms such as language, communication, knowledge and understanding when addressing visual literacy. Many philosophers, educators and psychologists, such as Suzanne Langer, Perry Nodelman and Allan Paivio, also use these terms in their research. However, examining the specifics behind these terms can be challenging because they are complex and difficult to define precisely. For example, “language” and “understanding” can refer to different ideas depending on the viewpoint of the person using the words. How do we know we have “knowledge” and at what point has an “understanding” been reached? What is a language? Are terms such as “the language of shadows” (Edwards et al., 2011) valid? These questions are vital because many researchers such as educational psychologist Catherine Snow (1998), and language educators Joan Isenberg (2001) and Mary Jalongo (2001) argue that language is one of the fundamental building blocks required for literacy development and that one must have a basic understanding of language before literacy development can begin. At first glance it may be easy to agree with this seemingly simple statement. However, examining this idea further proves to be much

more challenging when one questions what language and understanding are and whether or not they can be clearly analyzed. Furthermore, what is meant by an “understanding of language” especially if this is a vital building block for literacy? Markers for signalling criteria when this milestone is reached should be determined as well, if even possible. This section will explore these ideas of language, communication, knowledge and understanding, in relation to the development of a literacy foundation.

There are many reasons to communicate. Sometimes we communicate to exchange ideas or to persuade, or we may we need to provide or seek information, while other times we may want to express our emotions. No matter what the reason is, the chosen method of communication varies and depends on many factors such as convenience, level of difficulty, availability of tools, purpose and personal preference. For example, I may want to tell my friend about a particular movie playing at the local cinema. There are a number of ways I could convey this information. I could compose a song and sing it to her, but I do not enjoy singing and my song writing skills are poor. I could create a painting about the movie, but this method would be time consuming and I might not be able to depict all of the information that I would like her to understand. So, in this particular case I would probably choose a verbal method of communication such as calling her on her cell phone because of its immediacy and ease of use. However, if I want to share the feelings that I experienced while watching a sailboat resting in the harbour during a warm summer evening to my friend, I would choose a different means of communication. In this case I would choose to take a photograph or make a painting of the scene to complement my description in words. Creating an expressive picture would be my preference, whereas someone else may choose a different method, such as writing a poem about the experience.

While there are many ways of sharing and conveying thoughts and ideas, this thesis rests upon examining two particular channels, namely, verbal and visual. On the surface these seem like very different languages or systems of communication, however, upon further examination one may discover that they are not entirely dissimilar.

When the term “language” is first considered, it is easy to define it as the link between a word and its corresponding object. This makes sense, as one sees an object and says what it is, or reads a word and understands the object that is represented. So

perhaps for Snow, Isenberg, and Jalongo, having a basic understanding of language before literacy can begin simply means that one needs to know some words in an oral format before he or she can begin to read them. However, language is much more. The richness that delineates a language becomes apparent as we begin to construct an adequate definition. According to the Merriam-Webster dictionary, language can be defined as “the words, their pronunciation, and the methods of combining them used and understood by a community”. The Oxford dictionary defines language as “the method of human communication, either spoken or written, consisting of the use of words in a structured and conventional way”. These definitions show that language involves more than just a collection of words. They can be verbal in nature (spoken) or visual in nature (written down). The sounds of the words and the way the words are combined play a considerable role as well. In addition, the fact that dictionaries are available also help to define language. Although words can be ambiguous, dictionaries exist and function to define the words that act as symbols.

Language, or more specifically verbal language, should not be confused with discourse. In fact, it is important to note that discourse involves more than just language. According to Gee (1999), discourse involves coordinating language with ways of acting, interacting, valuing, believing, feeling, and with bodies, clothes, non-linguistic symbols, objects, tools, technologies, times, and places. Social languages also depend on the audience. For example, a teenager speaking with a friend will use a different style of language than speaking with a teacher at school. In addition, the language one uses is connected with his or her experiences, family, friends and identity.

Language also depends on context. Ludwig Wittgenstein (1889 – 1951) was intrigued by language and explored its inner workings in the *Tractatus*. He continued his inquiry into language in *Philosophical Investigations*, when he began to examine the importance of context. Wittgenstein (2001) states “the meaning of a word is its use in the language” (S 43). In other words, it is not the single word that is meaningful, but rather the way the word is used in a sentence. Wittgenstein (2001, S 27) uses the example of someone saying the word water. The meaning depends on the way it is said and the context in which it is said. If the word is screamed, it could be interpreted as a warning that a flash flood is on its way. If it is said quietly then it could be interpreted as someone questioning whether or not water is available. Another example can be seen

with the word “broken”. The meaning of the word is vague and depends on the context in which it is used. If a child states “My toy is broken”, the meaning of the word “broken” depends on the usage and the actions surrounding the word. An action figure could be smashed and irreparable, thus considered to be broken. A Barbie doll could have an arm fall off, thus considered to be broken, but also easily repairable by snapping the piece back on. A puzzle could be considered to be broken until put together properly. Are all of these toys broken? Is it possible to say that one is “more broken” than another? In the English language, we don’t have words to accurately describe various states of being broken. Instead we rely on the context to determine the intended meaning of the word.

Another important facet of language involves the rules governing grammar and syntax that exist in order to define the ways in which words should be used. Once a person understands the rules, he or she can use and adapt them to use language in various ways. Moreover, verbal language is the only code that can speak of itself through itself, rendering it unique. Finally, as mentioned in the dictionary definitions, the word(s) need to be understood by a community. Using them in a conventional manner ensures that most receivers will be able to interpret the word(s) and make sense of them, resulting in a successful communication.

As different domains such as music and art are explored, the idea of having different ways of expressing oneself, or forms of language, emerges. For example, Reggio Emilia educators would define language as any way children can show their competence and abilities. They embrace the “hundred languages of children” as they express themselves through “multiple paths and all their languages; including the expressive, communicative, symbolic, cognitive, ethical, metaphorical, logical, imaginative, and relational” (Edwards, C. et al., 2011, p. 7). Children are encouraged to make their own thinking visible through many different modes such as spoken language, gestures, drawing, painting, building, clay, shadow play, dramatic play, and music.

Moreover, as an artist, I have heard other artists speak of artwork as being a language in itself, implying that visual art is more than a means of expressing oneself. It could be said that every form of art has its own language. Composing and listening to music requires a specific musical language. Creating and viewing visual artwork

requires its own language. In order to be able to connect to a piece of artwork, the visual language must be understood by the viewer to some degree. This can be thought of as along a continuum where every person approaches the arts and experiences them from their own perspective. For example, a person with a broad background in the visual arts, who has experienced art creatively and appreciatively and has knowledge about art history, will be able to look at a painting in a different way than someone who has limited experience. This does not mean that one person will necessarily have a better experience with a painting than another. Instead, the person with more knowledge of the language of art may have a more in-depth experience; the potential for a richer experience exists. If language can be considered as a collection of spoken or written symbols that follow specific rules, depend on audience and context, and are used to communicate ideas and feelings, can visual art also be considered a language?

The Language of Art

A great debate exists among fine art scholars as to whether or not art is a language. Many artists and philosophers talk about art being a language, and some, like Rudolph Arnheim (1967), even deem it superior to verbal language because it comes closer to the original stimulus than verbal language, which he calls linear and one dimensional in comparison. Philosophers such as Suzanne Langer (1895-1985), Albert Hofstadter (1910-1989) and Robin Collingwood (1889-1943), have argued that art is a language. Both Langer and Hofstadter claim that concepts such as symbols, truth and validity connect art and language. Collingwood takes the argument further with his claim that art, an activity of expressing emotion, and language, a vehicle to show emotion, are identical. While often criticized, Collingwood's account is interesting because he highlights the expressive dimensions of language and art. As I shall show, Ernest Gombrich (1909-2001) also provides a strong analogy between art and language.

However, numerous scholars argue against art as a language because it does not have the traditional attributes that define language as previously discussed. Those who argue against art functioning as a language claim that the arts do not follow any particular coding system (Broudy, 1972; Forrest, 1984). A dictionary does not exist that explains the meaning behind the symbols. As Schroeder (2006) explains in his

discussion concerning Wittgenstein's treatment of meaning, lexicographers establish the meaning of a word through a study on how the word is used, "a dictionary gives the meaning of a word correctly if and only if it accurately represents accepted usage" (p 169). A lack of a dictionary providing the correct meanings of visual symbols used in the visual arts means that there is no formal consensus and usage of an art language among a community. Langer (1953, p 380) states "Since there are no semantic units with assigned meanings which, by paraphrase or translation, could be conveyed by equivalent symbols, as words may be defined or translated, there is no way of further identifying the import of a work." In other words, an art language cannot be directly translated into other language, like English into French or Russian, nor does a conventional system exist where the visual symbols are universally accepted and defined. Critics such as Forrest (1984) claim that there the arts do not follow a codification system. Unlike the language of science and math that follow specific rules and are unambiguous, art is ambiguous and context-dependent, and thus is not a language. However, those who follow this line of reasoning must remember that verbal language is often ambiguous and context dependent as well, as illustrated in my earlier discussion about Wittgenstein's treatment of the word "water" and my example of the word "broken". However, it is still a language.



Fig. 2



Fig. 3

Using context cues to derive meaning occurs in the language of art, just as in verbal language. Wittgenstein refers to words having meaning only in a sentence; the meaning of each word is derived from being within a context of other words. The same

argument can be made with visual artwork. Pictures often provide information from the specific objects depicted as well as how they relate to each other. According to Nodelman (1988), the “objects themselves become meaningful through the contexts they evoke, which relate them to our general knowledge and experience of life, of literature, and of visual art” (p.101). Like in the paintings above, a viewer could look at a painting of Venus. However, if the titles were not present, the viewer would have to examine the star in context with other clues provided in the painting in order to determine whether or not it is the morning or evening star. Figure 3 shows a moon near the star, and thus many people would automatically associate the star with the evening, even though the moon is often visible during the morning and in the daytime. However, the viewer may have a harder time discerning the time of day with the first painting, as the sky could look similar at various times in the morning or evening as in these paintings. Looking at the shades of blue surrounding the star and along the horizon may aid the viewer in “reading” the painting and discerning meaning from it.

Lahey (1988), a verbal language theorist, developed a model that features the three key components of verbal language that are needed to function together in order for verbal language communication to occur smoothly. These components include form, content and use. Form refers to the sounds, words and word order of verbal language, content refers to the word meanings and sequencing, and use refers to the way language functions to achieve certain goals such as conversation and social rules. This model can also be applied to the language of art where form equates to the elements of art and principles of design in visual art, content corresponds to meaning, theme or agenda of the artist, and use can refer to how the artist applies the elements and principles of design. While the emphasis on each component may vary between artworks, most art combines form, content and use, functioning similarly to verbal language.

From a language development perspective, verbal language has two components, receptive and expressive (Bzoch & League, 1971). Receptive language refers to understanding of words used by others; one acts as a decoder of verbal language. This parallels viewing and interpreting visual symbols in works of art. Expressive language refers to communicating ideas by speaking or writing. One acts as a coder, creating symbols through verbal or written language. This corresponds to the

creation of visual symbols in artwork. Graphic symbol development (see appendix B) and its application are similar to learning and applying the alphabetic system. Like learning letters and building them to form words, applying grammatical rules to the words, and finally using them in different combinations and styles of writing or speaking, children first learn the basics in mark-making, such as line and shape formation, then certain rules of drawing, such as shading or perspective techniques. The rules help the language be understood by a community of people by providing a conventional structure. Following the same conventions allows people in the same community to interpret the messages. Take, for example, *The Natural Way to Draw*, by Kimon Nicolaidis (1990). In this book Nicolaidis teaches us how to draw by going through numerous exercises. Students learn how to draw by following various “rules” used in the art community such as rules of foreshortening and perspective, like young children learning how to read and write using words and grammatical rules verbal language. When reading the reviews from people who have purchased this book, I discovered that many people were very happy with their purchase because, after completing the exercises, they were able to follow the “rules” and draw pictures that others can interpret as being lifelike. Once the rules are understood, the artist can apply and adapt them in his or her own style.

Each artist has his or her own style of applying the rules. Gombrich (1960) explains this idea through his treatment of “schemata” (p. 87). The artist can never truly explain how he or she sees the world. Do you see the orange the same way I do? Does the orange color appear to you the same way as it appears to me through my eyes? This is something we can never know. The closest way an artist can express him or herself is through his or her “schemata”, the conceptual framework that can illustrate how one sees the world. In other words, an artist uses schemata to construct a visual representation. Like a person using phonemes to construct words in verbal language, an artist uses schemata to construct images to communicate. Gombrich (1960) provides the following example:

He [the artist] begins not with his visual impression but with his idea or concept: the German artist with his concept of a castle that he applies as well as he can to that individual castle,..... The individual visual information those distinctive features I have mentioned are entered, as it were, upon a pre-existing blank or formulary. (p 73)

It is the artist's starting point which he shapes and contours, adding to and subtracting from, depending on what he sees. In this way the schemata shape the ensuing visual language. Verbal language also refers to the methods of combining words, which parallels the way the artist composes and arranges schemata in the artwork.

With any language, a group of language users must exist, those with experience with the language. In the case of verbal language, the listener must have experience with the language in order to be able to interpret it. For example, my family speaks predominantly in English. My nephew, a teenager, also speaks English and for the most part we understand each other because we use English words that we both have experience using. However, at times I do not understand him because he uses slang that he uses with his friends. From his point of view, he always speaks in English, but just adapts the rules of the language to suit his needs. I am not familiar with teenage slang and so, although we both speak English, I cannot always interpret what he says. Similar occurrences happen with visual art. Whoever is viewing the art needs to have experience with the particular language and be familiar with its rules. For example, someone viewing Cezanne's *Four Apples* may be able to interpret it as a group of four apples, but may find interpreting Kandinsky's *Dominant Curve* much more difficult, like I find interpreting my nephew's slang difficult at times. Although a viewer may be able to look at both paintings and identify colors and shapes, he or she may not be able to interpret the language of art with the same amount of ease. However, this does not mean that the language does not exist.

What happens if a group of language users does not exist? Could a language remain a language only to its creator? If this is true, then perhaps it could apply to the language of art as well, so that visual art could only be understood by its creator. Wittgenstein devoted part of *Philosophical Investigations* (2001) to exploring the possibility that a language can exist only to its creator. In order to be a true private language, it must be a language that nobody else can understand, it cannot be one that simply has not yet been translated and must function to the individual in a way that only he or she can use and understand it (Wittgenstein, 2001, S 243). However, if only one person uses the private language, there is no way to determine whether or not the words consistently mean what the individual intends them to mean. As Wittgenstein (2001) says, "whatever is going to seem right to me is right" (S 258). Language exists and

functions because the words are also understood and defined through their relationships with other words, in a community of use. Language makes sense in its context and within relationships, which is itself a public occurrence. Assuming that an inner feeling or idea occurs that is not defined, as soon as something is used to define this occurrence “privately” and internally, it just becomes something that is private in the sense that it is not shared with others. As soon as it is defined, merely defining the object/sense turns it into a linguistic concept, which is in itself a public concept that others could use and understand. So language by its very nature is not private and exists through its public existence.

Different ideas, feelings and thoughts are best communicated through different means; not all information can be efficiently conveyed through one channel. In other words, not everything can be conveyed in its entirety through verbal or visual means. Gombrich (1960) addresses this topic by stating:

The terms “true” and “false” can only be applied to statements, propositions. And whatever may be the usage of critical parlance, a picture is never a statement in that sense of the term. It can no more be true or false than a statement can be blue or green. Much confusion has been caused in aesthetics by disregarding this simple fact. (p. 68)

In other words, images cannot be true or false but can be blue and green. Verbal language cannot be blue and green, but can be true or false. Worth (1981) provides a similar argument when he says that images describe what is, similarly to the verb “to be” in its existential sense. Images cannot literally describe what is not. They cannot assert or deny. On the other hand, images can convey how things look, including what is not possible, imaginary things, creatures, or events, such as the surrealist illustrations in *Imagine a Day* by Sarah Thompson (2005). However, even these images cannot tell the viewer what he or she does not see. In addition, while the image itself cannot be true or false, it can be a true or false likeness of something. For example, Rembrandt’s self-portraits show something about the nature of aging. We could say that his works show us truths about the human condition. This differs from Gombrich’s treatment of what can be truthful. According to Gombrich (1960, p 67) only text can be true or false, and this includes captions and titles of paintings. Only once a painting has an accompanying caption can the viewer begin to assert whether or not the information is true or false. Gombrich gives the example of a picture of a valley with several train tracks running

through it to the roundhouse accompanied by the caption “The Lackawanna Valley”. The difficulty lay in the fact that at the time of the painting, only one railway had been built, so the painting was not a true likeness of the valley. Inness, the artist, felt the extra tracks were in fact, a lie, and hid them behind puffs of smoke. However, as Gombrich (1960) explains, “the lie was not in the painting” (p 67), but rather in the incorrect caption. Inness’ tension could have been remedied by changing the caption to something like “A Proposed View of the Lackawanna Valley in Five Years” or by removing the caption altogether.

Unlike language, pictures cannot provide propositions or propositional statements, cannot depict negative events, or provide a dimension of truth or falsity because of their inability to depict conditionals, counterfactuals, negatives or past and future tenses. For example, Cezanne’s (1880) *Four Apples*, as shown on page 39, is a painting of four apples. The painting cannot tell the viewer “these are not bananas” or “I don’t like apples” or “I will give you these apples in return for a sandwich”. At best, the image is vague and the viewer must use contextual information to make meaning of the image. For example, the viewer may examine the painting and see darker shades on the bottom of one apple and interpret it as a bruise, possibly from falling on the floor. Rene Magritte (1928) plays with these ideas in his painting *The Treachery of Images*, a painting of a pipe with the words “Ceci n’est pas une pipe” (This is not a pipe) written below the image. While the image itself cannot express negatives, the words express a negative sentiment that seems to oppose the image. While the image is a likeness of a pipe, the painting is just an image. It is not a real pipe.

The Language of Picture Book Art

Most of the discussion so far regarding visual art has pertained to all forms of visual artwork where artists are free to create their work using more or less their preferred methods, using their choice of materials. As an artist I find inspiration in many things around me such as a sentence a child utters, a movie, a walk in the park. Moreover I am free to create in the way I choose, using the materials that I deem most suitable for my purpose. My language is minimally restricted.

This is different from art specifically created for picture books that must follow the text and at times, is subject to limitation including media and size of artwork. Despite this difference, many philosophical ideas can still be applied to art in picture books as well. For example, *Tough Boris* by Mem Fox (1994) successfully applies Gombrich's account that art does not lie in order to help tell the story about a pirate. She takes advantage of the fact that the readers will debate the truthfulness of the text, but will take the illustrations as face value. In this case, the text tells how mean and scary pirates are, along with illustrations that show rough-looking pirates acting with kindness and compassion. This successfully portrays the underlying theme of the book that one's character on the inside matters, not what he or she looks like on the outside. Other picture books such as *Pinkerton, Behave!* by Steven Kellogg (1979) use the same interplay to create humor. Readers question the validity of the text when the words say one thing and the images show something else, such when the dog's owner says that Pinkerton comes when he's called but the illustration shows the dog jumping out of the window. The reader does not question the truthfulness of the illustration, but instead questions the truthfulness of the accompanying statement. This results in a humorous picture book, successfully capturing the reader's attention and encouraging consideration to detail in the images.

From an artist's perspective, the creation of art for picture books is automatically accompanied by certain limitations which constrict the language of art. The size of the artwork is dictated by the size of the scanners available at the publishers. Materials can be dictated by publishers. While most publishers accept two-dimensional paintings, sketches or prints, other types of artwork can cause difficulties. For example, three-dimensional artwork must be photographed in a particular way with special lighting and equipment. Pictures made with plastercine, like Barbara Reid's work, must be scanned in a particular way. These limitations constrict the language of art.

In addition, the content of the image is dictated by the story, which may or may not be written by the artist. This can cause challenges for the artist as the artist must find inspiration within the text, choose what to show and more importantly, what not to show. As an artist, I have found that the process of creating artwork for picture books is much different than creating artworks for myself or for specific commissions. When I create art for myself I usually tend to play with the materials or colors; I may blend,

splash and drip paint to experiment with color and various effects. I find specific commissions to be a little more rigid because the subject, size and sometimes the material, may be requested by the buyer. I have found that creating artwork for picture books is the most restraining on my creativity. When I was asked to create some watercolor paintings for an upcoming picture book, I was delighted and excited. However, I soon found the project to be one of my most challenging assignments because I had to interpret the text to my liking as well as the author's liking. I did not have the freedom to use all of the materials available to me and desired to achieve certain effects. Instead, I had to use pre-defined techniques and media, thus forced to problem-solve in order to create desired effects and images. However, despite these limitations, my own style and expressiveness continued to be apparent throughout the work.

However, more often than not, the artist's struggles are not evident in the final product because the reader does not know the artist's original intentions, or that perhaps the final images were developed through several iterations. The reader only knows what he or she sees – an image that appears complete and assumedly reflects the artist's intentions that reflect some aspect of the text.

John Ruskin, a prominent art critic during the Victorian era, looked at the correspondence between words and images and examined illustration as a separate form of artwork. Although he shallowly related words and pictures by concluding that they both are the result of scratching a surface to make a sign, he did make distinctions between illustration and text. He noted that whether or not the illustration reproduces the text is irrelevant; what matters is why the artist has chosen a particular way to create the image to signify what he or she thinks of the text and is aware that the same text may be interpreted different ways by different people. This promotes a deeper approach to examining artwork found in picture books.

It is true that the images in a picture book are, in fact, illustrations. As such, the artworks involve interpretation of the literary text as noted in my anecdote above. As Paola Spinozzi (2007) claims

An artwork that illustrates a text does interpret it. Certainly, its dependence on, or escape from, the verbal source, its connection with,

or disconnection from, words that come before, and testify to another form of art, problematize its autonomy. However, though ontologically derivative, illustration aims at visually signifying far more than verbal signification. Besides, the visual medium can seize components of literariness that can be highlighted, enhanced, and metamorphosed by means of visual figuring. (p. 15)

Taken together with the text, the artworks convey meaning, and at times, the meaning conveyed by the artist differs from the meaning intended by the writer. For example, I took a writing course with Michael Katz, founder of Tradewind Books, a children's book publishing company in Vancouver. He told numerous stories of texts being shipped off to illustrators, and returning to shock the writers with characters being changed from children to animals or settings from reality to fantasy. These interpretations that shine through the artwork, placed alongside the text, changed the finalized books in their entirety. The illustrations can aid in providing a deeper meaning of the text, or suggest a completely different meaning altogether. However, it is the picture book as a whole – the coming together of text and images - that remains important and contributes to its uniqueness. Although illustrations are different from other forms of visual art mostly due to the restrictions on the artist, they continue to be excellent examples of visual art that remain accessible to educators in schools. The fact that they are forms of visual art and come in a variety of styles, media and accompanying text, make them excellent choices for developing visual literacy in the classroom setting.

The Ineffable, Concrete and Abstract

While some information is better suited for one method of communication than another, some information cannot be said at all. As Leonardo Da Vinci once said, "And you who wish to represent by words the form of man and all the aspects of his membrification, relinquish that idea. For the more minutely you describe the more you will confine the mind of the reader, and the more you will keep him from the knowledge of the thing described. And so it is necessary to draw and to describe." We can talk about a painting, analyse its colors, shapes and lines, but we cannot always use verbal language to explain artistic meaning in the fullest sense. Not all aspects of visual art can be verbalized, such as a particular feeling, a sense or an ambiance. These are some of the underlying aesthetic aspects in the arts that affect us that can't be verbalized mainly

due to their uniqueness. This has implications for teachers and students studying the visual arts. Educators must realize that some aspects of artistic meaning and the aesthetics that affect the viewer cannot easily be discussed in everyday language. This does not mean that the artwork does not affect the viewer or that the viewer may not understand the artwork, but instead, that the viewer simply cannot express him or herself fully and completely in a direct verbal manner, even when the elements of the artwork are teased apart and examined individually. Even with verbal language, not everything can be described or articulated. In general, there are multiple ways of explaining various concepts and ideas, yet there are many unique situations that elude, in any complete sense, ordinary discourse. In such cases we have to resort to metaphor and poetry, there again saying what is propositional and showing what can be experienced.

The flexibility and availability of various tenses allow language to function abstractly and depict objects and events remotely in space and time. It is also abstract in the way it functions through culturally derived codes once removed from direct experience (Barry, 1997, p 116). Many abstract words also exist in everyday language and do not provide an associative image, such as the words *truth* or *religion*. Although an image in the mind's eye does not usually accompany these types of words, they are nevertheless easily understood. Again, this points us back to Wittgenstein's argument about the importance of context.

Visual images can also be described as being abstract, but in a different manner. This term is often used for images where the viewer may not immediately recognize a referent. Even when referents are not recognized meaning can still be drawn from the image. According to Paivio (1981), there are two strategies that viewers can use to find meaning in an image. If one uses attributional strategies for making meaning then the image could mean almost anything and is limited by the viewer's own experiences. If the viewer uses communicational strategies then what is implied and inferred begin as an existential awareness of particular objects, persons and events that are ordered, sequenced, and structured in ways to imply meaning by the use of specific conventions, codes, schemata and structures, functioning similarly to language.

The language of art and verbal language function similarly in that they both can be used to express concrete and abstract ideas. Verbal language can express concrete

ideas, such as when it is used in everyday conversations. When I talk about “my kitchen table”, the words directly relate to their referents. “My kitchen table” is something concrete and I use words that are commonly used in a conventional way to transmit meaning. Sometimes people want to express something that cannot easily be expressed using everyday language. For example, perhaps there is not a word in English that directly represents the uneasy feeling I had when walking alone along the beach last week. The best way I can describe it is by using the word “uneasy”. However, that is not quite the feeling I experienced. In this case I could write a poem about my experience using language in a different way, perhaps metaphorically, in order to express something abstract.



Fig. 4



Fig. 5

The language of art can function similarly. A painting or a drawing can be representational and show a picture of something concrete. For example, Cézanne’s (1880) *Four Apples* as shown in Figure 4 is a painting that uses color, line and texture to depict four apples on a table. While the painting of the apples is representative it is also expressive. While I cannot verbally explain the essence of an apple, Cézanne effectively captures the very nature of apple-ness in his painting. Cézanne’s use of color and brush strokes, as well as the possible movement of the apples and the resulting tension, create a certain and unique expressiveness. Despite its expressive quality, the subject is clear. Like moving from conversational language to poetry, the language of art can change as well. Visual art can also depict abstract ideas, such as inner feelings that are experienced when listening to different types of music. Kandinsky was fascinated by music and captured the essence of music in his 1936 painting *Dominant Curve*, as shown in Figure 5. While I cannot say the painting is an image of music like Cézanne’s painting is an image of apples, the painting effectively captures the essence of music

and to me, translates the rhythms, build-up and excitement that the musical notes carry into brush strokes and color on canvas. In this way Kandinsky shows the experience of music.

The Whole

While some elements of an artwork work well separately, they form a deeper meaning as they come together as a whole. A simple example can be seen with Seurat's 1884 painting *Bathers at Asnières*. Upon close examination the viewer will find that the painting is merely small dots of paint. Up close the dots are interesting and the soft colors are soothing. However, the dots themselves are meaningless until they are all examined together, forming a magical image of visitors at the beach.

The effect of the whole goes beyond the elements of the artwork simply coming together in a unified manner. The expressiveness of the artwork relies on the viewing and experiencing the image as a whole. As Matisse (1908) explains, everything that is and is not included in a painting is important and plays a role. He states "The entire arrangement of my picture is expressive; the place occupied by my figures, the empty space around them, the proportions, everything has its share" (Matisse, 1908, p 12). It is the impact of the included and excluded elements as a whole that is important and affects the viewer. Langer (1953) also explains these concepts when she says,

A work of art must carry in itself its complete significance and impose it upon the beholder even before he can identify the subject matter. When I see the Giotto frescoes at Padua I do not trouble to recognize which scene of the life of Christ I have before me but I perceive instantly the sentiment which radiates from it [...]. The title will only serve to confirm my impression. (p 83)

In other words, a viewer can deconstruct the details of the image and examine the possible symbolism of each detail, but in order to grasp the complete meaning the image must be considered as a whole. An artist may follow the "rules" of painting and drawing, such as shading and foreshortening, but the expressiveness of the image comes through the artist's style and impact of the image in its entirety. One cannot fully appreciate or understand an artwork unless it is considered in its entirety. Everything

comes together and plays a part including the objects, colors, shapes, movements and tensions between these aspects. As Wittgenstein (1974) says, “In this case ‘to understand’ is something like ‘to take in as a whole’” (p 40). Moreover, this impact cannot always be fully described in words, no matter how one tries to deconstruct it. For example, *The Goldfish*, by Matisse (1910) is one of my favorite paintings. It is a rather simple painting of four goldfish in a glass jar surrounded by plants. When I look at it I cannot explain why I like it because I am not fond of fish and orange is one of my least favorite colors. I have a tendency to forget about my own plants and so they usually die quickly. The image itself is not realistic and the table’s perspective is incorrect. However, I always smile when I see this painting. Perhaps the contrast between the colors, or the interplay between the shapes, or the calmness that radiates from the image that strikes me the most. For me, teasing the image apart is meaningless; the value is in the painting as a whole.

The importance of the impact of the whole applies to language as well. While each word is valuable, the words do not hold meaning without context (Wittgenstein, 2001). Gombrich (1972) touches upon similar ideas when he states “language operates with universals, and the particular will always slip through its net, however fine we may make its meshes” (p 96). There are times when one cannot explain something directly with words alone; instead a picture can be painted with words in order to make the experience more fully understood. Richmond (2008) provides an excellent example when he uses words to provide the reader with an experience of meeting a man on a bridge in “*Notes on saying and showing, beauty, and other ideas of interest to art and education, with reference to Ludwig Wittgenstein*”. Instead of trying to directly describe the meeting, he uses words to paint the scene in the reader’s mind. Everything is described, from the location of the meeting to what was said and what was not said. In this way, Richmond shows the reader rather than tells the reader about the experience.

Richmond’s style of writing in this article is reminiscent of pictorialist theories of language which argue that verbal images can be very pictorial in nature. Joseph Addison, a writer and scholar from the 18th century and an avid supporter of the pictorialist theory of language, claims that verbal modes of communication surpass visual modes because verbal creativity can achieve amazing pictorial qualities, resulting

in intense pleasures of the imagination unlike the images that sight perceives in visual artworks. Addison (1712) states:

Words, when well chosen, have so great a Force in them, that a Description often gives us more lively Ideas than the Sight of Things themselves. The Reader finds a Scene drawn in Stronger Colours, and painted more to the Life in his Imagination, by the help of Words, than by an actual Survey of the Scene which they describe. In this Case the poet seems to get the better of Nature; he takes, indeed, the Landskip after her, but gives it more vigorous Touches, heightens its Beauty, and so enlivens the whole Piece, that the Images which flow from the Objects themselves appear weak and faint, in Comparison of those that come from the Expressions. (p. 292)

In *A Philosophical Inquiry into the Origin of our Ideas of the Sublime and Beautiful* (1756), Edmund Burke explains that verbal language can only convey images through approximation and vagueness. While Addison embraces the approximation and applauds the way it sparks the imagination, resulting in greater imaginative pictorial experiences, Burke criticizes these ideas because of the obscurity of what is unsayable. Because of this nature of verbal language, Burke believes verbal language is more suitable to render intense emotions, enabling an experience of the sublime. While verbal language cannot signify wholeness like images, it is suitable to render emotions by using words that suggest, impress and evoke. Burke (1906) explains

the most lively and spirited verbal description I can give raises a very obscure and imperfect *idea* of such objects; but then it is in my power to raise a stronger *emotion* by the description than I could do by the best painting. This experience constantly evinces. The proper manner of conveying the *affections* of the mind from one to another is by words; there is a great insufficiency in all other methods of communication; and so far is a clearness of imagery from being absolutely necessary to an influence upon the passions. (p. 111)

The ability of words to show empowers writers to spark the imaginations and emotions or readers in a way that is similar to visual artists.

Within the whole is where we find meaning. E. B. Huey, noted psychologist and author of *The Psychology and Pedagogy of Reading* (1908, reprinted 1968) argued that reading for meaning involves the awakening of feelings and images. He believed that, as one reads, he or she visualizes the words and experiences associated feelings, resulting in meaning formation. However, he did not continue with his theory because

he could not visualize words like “as” or “in” on their own. Psychologist and educator P. Richard Bugelski (1968) took these theories further by claiming that meaning is relational and contextually determined and emerges after “tapping prior experiences in terms of imagery and feeling” (p 48). He continued with Huey’s ideas by claiming that when the relational words are considered in their semantic context, meaning emerges as the imagery unfolds. Feldman and Woods (1981) give an example of a cat and an umbrella. Taken separately the unrelated images provide little information. However, if we say that the cat is carrying an umbrella, the picture becomes integrated and carries meaning. According to Bugelski (1968), an integrated image “is easily learned because it is, in effect, a sentence” (p 15). They are statements because they evoke associated images and ideas such as, in this case, questions such as: Did the cat open the umbrella? Why does he have an umbrella? Where is he going with it? Moreover, the feelings associated with the image contribute to its appeal. Viewing the illustration as a complete image allows the viewer to see the individual aspects in a context and experience them together as a whole. In this case, the whole really is greater than the sum of its parts.

Understanding & Language

What does it mean to understand a picture, a drawing?

Here too there is understanding and failure to understand. And here too these expressions may mean various kinds of thing. A picture is perhaps a still-life; but I don't understand one part of it: I cannot see solid objects there, but only patches of colour on the canvas.— Or I see everything as solid but there are objects that I am not acquainted with (they look like implements, but I don't know their use).—Perhaps, however, I am acquainted with the objects, but in another sense do not understand the way they are arranged. (Wittgenstein, 1960, S 526)

In the field of education, teachers, parents and students often use the word “understand”. I hear it used frequently: “Do you understand your math homework? Do you understand what the poem is telling you? I don’t understand! Explain it again!” But what does it mean when someone understands or does not understand something?

Many people may be tempted to think of words such as “understanding” as a mental state. This makes sense as understanding is a function of the mind. However,

Wittgenstein (1974) points out that the criteria we use for determining whether or not someone understands something depends not so much on mental states as on public behaviour. Understanding each other goes hand in hand with language in that people understand each other because of the way language is used in social contexts. Language only functions as a part of shared norms in society.

I would argue it is the same in the arts. The language of art exists within groups of individuals who share norms and forms of life. Richmond (2010) refers to the language of art as "shared practices of making and shaping images to represent and express ideas, feelings and meaning" (p. 5). Moreover, he explains that this language embodies many features that are common among artworks, such as pattern and structure, expressiveness, visual poetry, creativeness and aesthetics, and this is what helps a piece of art be understood (Richmond, 2010). Nodelman and Reimer (2003) provide a good example of how those who share the language of art can understand the artwork. They describe anthropologists showing African and South American cultures "realistic" photos and drawings, but they were often not able to recognize what the pictures depicted because these image formats did not exist in their cultures. In other words, the cultures did not share the same norms. For example, the African and South American people used pictures for different purposes; slit-representation drawings were used for labels or marks of identification. Drawings were not intended to convey what an object looked like, and so the African and South American people lacked the strategies for making sense of them. They did not share the same language of art and consequently did not understand each other.



Fig. 6

I have often thought about the language of art as I created my own paintings and artwork. For example, Figure 6 shows “Blue”, a painting that I created to communicate a sense of movement, beauty and excitement. It was a painting for my daughter, who loves Cinderella. I did not want to write the story word for word, nor did I want to use “Cinderella” as a title. Instead, I wanted to capture the feeling of Cinderella and inspire my daughter’s imagination but in a way that she could understand. I used color, movement and pattern to communicate these feelings in the painting. The words were carefully chosen to be quite vague and open, so that she could think about and interpret multiple meanings and possibilities, and come to her own understandings. She understood the painting immediately, interpreting the blue color as Cinderella’s gown, the movement as dancing at the ball and running down the palace steps, and the sparkles as magic. In a sense, the painting captures the feeling of prettiness.

Langer (1957) states “art is the creation of forms symbolic of human feeling” (p. 40). She argues that language (discursive symbols) has specific meanings that are definable whereas presentational (nondiscursive) forms are untranslatable and understood through relations in context. Language articulates thought and everything else that is not spoken through text represents feelings (Langer, 1957), such as the feelings expressed in the painting.

As Marie McGinn (2001) explains, “what can only be shown and not said has nothing to do with thoughts (that is, with truths) that cannot be expressed without violations of logical syntax; rather, it concerns the conditions or limits of sense that are revealed only in our actual use of language, in the application that we make of it, that is, in our use of sentences with sense” (p. 28). In other words, McGinn explains that there are no unsayable thoughts, but instead it is just the limits of language that prohibit the thoughts from directly being transferred from one person to another using everyday language. Using images that show the ineffable and then using language to talk about them, or using language poetically or metaphorically forces one to use language in various ways to attempt to capture the same feelings or ideas, like Richmond’s (2008) example of using language to capture the essence of meeting the man on the bridge. Although one may never actually be able to use language to express the inexpressible, by going this route one may come closer by using language to say what is shown, rather than focusing on what is said.

My painting uses both discursive and nondiscursive forms of communication. The text has specific definable meanings and the images, through the use of specific elements and principles of design, communicate feelings and mood. Together these forms of communication create an interesting and effective painting that communicates to the viewer on multiple dimensions. Talking about the painting can help to captivate some of the feelings sparked by the Cinderella story. Although the actual, specific feelings cannot be said in words, talking about the painting and using words such as sparkly, blue, fancy, party, excitement, glass, and dance can help recreate similar inner feelings.

When asking whether or not verbal language and the language of art are similar, I borrow from Wittgenstein when he talks about family resemblances. When

Wittgenstein (1974, S 66-71) argues that some words have “family resemblances” he means that some words have things in common with each other allowing one to categorize them together even though no one single thread or property uniting all cases exists. One can easily see how this occurs among family members; David may have a particularly long nose that looks similar to Uncle John’s, Susan may have blonde hair that is similar to her mother’s, Fred and Uncle John may be tall, and many members of the family may have blue-green eyes. No two people look exactly the same in the family, yet nobody looks absolutely different on every dimension, either. Looking at everyone together an outsider will most likely be able to see the similarities and determine that each individual belongs to the same family. Wittgenstein uses the term in a similar manner when he discusses games. He argues that most people know enough about games so that when a new game is introduced, he or she is able to categorize it as a game because it has numerous resemblances to other games. For example, some games involve cards (Crazy Eights) while others use balls (Soccer), some games require many people (Hockey) while others can be played alone (Solitaire), and some games require special equipment (pens, paper, dice in Yahtzee) while others do not require any tools at all (Tag). There are many different kinds of games with various requirements, yet we can categorize them all as games because of their resemblances. Moreover, seeing the resemblances may be intuitive; like looking at members of a family, one does not need to make a list of a specific number of similarities to categorize the new game as a game. Examining verbal language and the language of art is similar because family resemblances exist between them. They both are a means of communicating. Artistic rules exist to govern how to apply various elements, functioning analogously to the rules of grammar and syntax that are applied to words in everyday discourse. Each individual uses and adapts the structure to communicate in their own style. Finally, the receiver needs to have experience with the language in order to be able to interpret it. So perhaps, verbal language and the language of art are not as dissimilar as previously thought.

Knowledge

The terms “knowledge” and “understanding” are also important in discussions concerning literacy development. Educators such as Susan Stravopolous (1997)

discuss making connections with students' knowledge and others like Bette Goldstone (1989) refer to illustrations increasing students' understandings. I have also heard many people, including fellow teachers, use the terms "knowledge" and "understanding" interchangeably. However, these terms are not synonymous. Dewey summarizes these ideas when he examines how meanings are related and structured. According to Dewey (1933), in order to fully grasp the meaning of something (a "fact" as he calls it), one must be able to see it in relation to the things around it (form an understanding). He states, "to grasp the meaning of a thing, an event, or a situation is to see it in its relations to other things: to see how it operates or functions, what consequences follow from it, what causes it, what uses it can be put to. In contrast, what we have called the brute thing, the thing without meaning to us, is something whose relations are not grasped" (Dewey, p. 137). In other words, knowledge refers more to facts and verifiable claims whereas understanding is much broader; understanding falls on a continuum and stresses the theory behind the facts. Howard Gardner (1993) differentiates understanding from "acceptable mastery" as having knowledge and being able to demonstrate a skill, as well as demonstrating the ability to generalize and apply the skill. This means that genuine understanding involves being able to demonstrate the ability to transfer knowledge seamlessly. Wiggins and McTighe (2005) also believe that transfer lies at the core of understanding. They state:

The ability to transfer our knowledge and skill effectively involves the capacity to take what we know and use it creatively, flexibly, fluently, in different settings or problems, on our own. Transferability is not mere plugging in of previously learned knowledge and skill. In Bruner's famous phrase, understanding is about "going beyond the information given"; we can create new knowledge and arrive at further understandings if we have learned with understanding some key ideas and strategies. (p. 39)

Transfer is an important concept presented in my thesis as it includes the idea of learning and practicing certain processes and concepts within a visual literacy domain and transferring them to reading and writing at a later date. Transfer is very difficult to prove and very few studies, such as those by Abigail Housen (2002), have shown this concept in the arts (as discussed in chapter 3). However, if students achieve understandings within the realm of visual art, it is highly probable that the images complement the words and vice versa.

This leads to the question of when does an accumulation of knowledge become understanding? Perhaps it is when the individual can transfer the *knowledge*; use it, change it, synthesize it, critique it in a way to address new challenges. Bloom separated the terms knowledge and application, with “application” found just above “knowledge” in his hierarchy. He explained that students must modify their knowledge to the situation. Again, this is transfer. Bloom and his colleagues (1981) state:

Students should not be able to solve the new problems and situations merely by remembering the solution to or the precise method of solving a similar problem in class. It is not a new problem or situation if it is exactly like the others solved in class except that new quantities or symbols are used. . . . It is a new problem or situation if the student has not been given instruction or help on a given problem and must do some of the following. . . . 1. The statement of the problem must be modified in some way before it can be attacked. . . . 2. The statement of the problem must be put in the form of some model before the student can bring the generalizations previously learned to bear on it. . . . 3. The statement of the problem requires the student to search through memory for relevant generalizations. (p. 233)

Therefore knowledge is an essential part of understanding, but understanding requires more. One must be able to determine which knowledge needs to be used, related and adapted in certain situations, thoughtfully and skilfully, to meet certain challenges. Therefore, in order to “understand language”, one must be able to use language, apply it seamlessly in different situations, and be able to use words in relation to other words. In reality, there is nothing “basic” about having a “basic understanding of language” before literacy development can begin, as proposed by researchers including Snow, Isenburg, and Jalongo.

A Road to Literacy

The ideas of language, communication, knowledge and understanding all come into play when planning to reach the goal of being literate. Traditional ways of learning how to read involve learning the alphabet and following phonics or whole-word programs, or perhaps a combination of the two. Students gain knowledge in the field, or become familiar with the “facts” as Dewey (1933, p137) would say, such as the alphabet, sounds and grammatical rules. At some point the knowledge comes together, students

begin applying the “facts” and reading begins. Knowledge becomes understanding when students begin to read effortlessly and seamlessly, focusing more on the meaning behind words and phrases rather than the word itself.

I believe that it is possible for students to move towards the goal from another route. While I cannot say if it is a faster or slower route, or whether or not this route can exist as a stand-alone method of literacy development, I do believe, however, that it can strengthen the base upon which literacy development can build. As students practice visual literacy by examining visual art, particularly artwork found in picture books, they gain opportunities to practice and develop language, communication and methods to view, interpret and problem solving, and gain appreciation for the arts, all of which play a role in in the language arts domain. The following chapter details how these aspects parallel each other between the two domains. By showing the relationships that exist among these variables, I aim to show how they might develop into deep understandings resulting in the transfer of knowledge from a Visual Arts domain toward the Language Arts domain, building a strong base to aid literacy development.

Chapter 3: Enriching a Reading Foundation Through Visual Literacy

Research Challenges

My research into this topic began with an exploration of the formal studies that have been undertaken that relate to visual literacy. Ultimately I hoped to find a few studies that showed how participating in the visual arts (either making artwork or viewing artwork) can help students improve their work in other subject areas, especially in Language Arts. At first I came across quite a few studies on the effects and benefits of participating in the visual arts and visual literacy projects including some managed by teachers (Boudo et al., 2006) and others by museums (Galef Institute of Los Angeles, 2004, Museum of Modern Art, 2002). These looked promising as some of the research claimed to show definite improvements in abilities that occurred as a result of participating in the visual arts. All promoted the value of an arts education, and provided excellent, well thought out theories, but many did not go into detail about exactly how visual art skills help students achieve better results in other academic areas or provide scientifically or statistically proven facts. Upon a closer examination, I found some research findings to be limited because of differing definitions of visual literacy, a lack of control groups or changes in teaching approaches throughout the study. For example, one study by Lauren Boudo and her colleagues claimed that teachers use and value visual literacy in their classrooms. However, the teachers in the study were able to create their own definition of visual literacy so in reality, every teacher in the study could have been answering the questions based on different teaching strategies based on very different ideas and concepts. Moreover, most teachers will use strategies that they think are beneficial and it is unlikely that a teacher would admit in writing that he or she uses teaching strategies that are not beneficial for their students. Another example can be found with a project by Linda Shohet that involved the Center of Literacy and students at Dawson College in Montreal. Researchers wanted to determine how art enhances

literacy and developed a project given to the Fine Art students at the college. In this project the students were given a project halfway through the semester that required students to create a picture and an accompanying text. As a research project, it should be noted that it was conducted over a short period of time and did not use control groups. In addition, the students were already Fine Art students and already knew a great deal about visual art. Was it really the artwork from this project that affected the students' literacy in the classroom? Or was it due to cumulative fine art experiences? It is impossible for this conclusion to be made under these circumstances. Another example can be seen with the "Different Ways of Knowing" program hosted by the Galef Institute of Los Angeles from 1991 to 1994 involving 920 elementary students that claimed that students were more motivated, enthusiastic, engaged in their learning as a result of the inclusion of fine art into the curriculum. At first glance the study sounds promising because of its length, the high number of students involved and the reputable name of the company. However, the whole approach to teaching also changed as the instruction became more interactive and student-centered. So was it really the arts that impacted the students? Or was it a combination of the curriculum and the interactive, student-centered teaching approach that made the students feel that they were more important and involved in their learning that resulted in increased motivation, enthusiasm and engagement?

Many studies claim that learning in the visual arts can help students achieve in other areas. At first glance this claim sounds acceptable, but in fact, claims like this must be examined very carefully. Is it really the visual art skills that are being transferred? For example, some large-scale surveys show that students who participate in visual art classes get significantly higher SAT scores than students who are not enrolled in art classes (Gardiner, 1996). In fact, the more art classes they are enrolled in, the higher the SAT score. However, Eisner has revealed that more courses in any field are positively correlated with higher SAT scores, not just visual art courses (Eisner, 2002, p.38). Moreover, science and math classes correlate even more highly than visual arts courses. This suggests that research that is undertaken in this area must be examined very carefully, removing biases and inadequate studies.

Kevin McCarthy and his associates (2005) state that many studies in the visual arts are "based on weak methodological and analytical techniques" and "do no more

than establish correlations between arts involvement and the presence of certain effects in the study subjects” (p. xiv). They criticize the studies even further by explaining that many studies are too general and do not consider how the perceived benefits can be created in other ways. These challenges cause a bias in many of the studies that have already been conducted. In order to avoid these difficulties, studies need to include groups of students that are comparable, either created randomly or by matching student abilities in each group, and assigning experimental and control groups. According to Eisner (2002), very few visual arts studies using such methods have been undertaken. Moreover, he has stated that arts education advocates must not blindly believe all findings from studies and encourages researchers to examine studies very carefully. Many studies have not been set up properly, such as omitting the use of a control group or do not account for biases such as the Hawthorne Effect (which occurs when the leader of the experiment has outcome preferences and unconsciously encourages the group to perform in a certain way). One example can be seen when New York’s Museum of Modern Art and New York City Public School System joined together to teach students about artwork and ascertain the aesthetic development stages of students. The Hawthorne effect was not accounted for during the course of the project. This was very important and could have easily hindered the accountability of the project, as researchers had art specialists and teachers who participated in specialized training teach the students. It can reasonably be assumed that the art specialists already enjoyed visual arts before participating in the project, and their pre-existing enthusiasm for the arts could have easily transferred and affected the students resulting in positive attitudes and enthusiasm.

In addition to these difficulties, Eisner (2002) explains that setting up a study to determine exactly how far the benefit of art programs reach is almost impossible. Researchers would have to have to begin with two groups of students, one participating in the arts and one not participating. This could be set up fairly and ethically with the second group of students receiving the art instruction at a later date. However, the more difficult aspect of the study would be determining what would count as “desirable” moral character traits and fully eliminating other influential factors. Determining what is and is not a desirable moral character trait, along with judging them with some type of evidence and measuring and evaluating them is impossible.

Other researchers, including Jane Remer, have come to similar conclusions. Remer (1990) has found that standardized test scores and competency ratings do not rise solely because of the presence of arts programs. In order to properly study this idea, the variables influencing performance in these assessments would have to be isolated and somehow controlled. This would be nearly impossible. However, although she does not have any reliable statistical evidence, in her experience she has found that schools participating in the arts have become a better workplace and the people in it became proud, satisfied and comfortable infusing the arts in their programs, which has led to increased motivation in school participation and general learning.

Upon discovering this I was a little concerned about my own research into the field, but I continued anyway. Even though a direct causal relationship cannot be scientifically proven, I continued to think that there must be some kind of overlap between visual literacy and print literacy. Needless to say, I also found few studies that directly examined a causal relationship between visual literacy in the visual arts and print literacy. However, in my research I did discover the elements that are important precursors to print literacy development. If developing one's visual literacy can also develop these elements, then perhaps it would be possible that visual literacy could be a means to develop a foundation for later literacy development. This chapter focuses on the precursors to literacy and how these, I want to argue, can be developed through visual literacy.

A Literacy Foundation

The following section explores the elements that are beneficial in developing a print literacy foundation. These include a basic grasp of language and the ability to communicate with others, a basic knowledge of symbols and how they work, motivation to try something new including reading, experience with literacy in use, and a preview of specific reading strategies. The ways visual literacy overlaps with the development of each of these strands of literacy is also explored.

1. Language and Communication

A means of communication

As outlined in the previous chapter, both the visual arts and written text can function as a means of communication. In the book *Words About Pictures*, Perry Nodelman (1988) refers to the term intertextuality, which he defines as “the interconnectedness of all acts of communication and their consequent dependence upon each other for their strategies of meaning making” (pg 104). For example, Nodelman explains that people follow the patterns of rational thinking and therefore, learning about topics and subtopics in one form of communication can also apply in other forms of communication. He also provides the example of an image of a person on a staircase with a dog. If we read an accompanying title “Architectural Digest”, then the reader will pay most attention to the staircase. If the accompanying title is “Dogs of the World”, the reader will pay most attention to the dog. This shows that the meaning derived from the text affects the way one makes meaning from the image. The strategies of meaning-making transfers between the modes of communication. In this case, one derives meaning from the text first, and then applies this same form of making meaning to the illustration. One influences the other. Even though we cannot measure and scientifically prove this relationship, it is clear that these acts overlap.

People have been using the arts as a means of communication for thousands of years. The arts were the first and the primary form of human communication (Cornett, 2003). Cave paintings show picture writing to communicate through common experience (Barry, 1997). For example, 30,000-year-old cave paintings in France and England communicate types of animals observed, such as images found in the Chauvet-Pont-d'Arc Cave, and 10,000 year old petroglyphs from Africa show people communicating with their gods. For centuries, illustrations were the primary means used to convey religious and political information to illiterate people. After wood engravings and printing techniques were invented in the 14th century pictures were used to convey knowledge on an even larger scale. Today the visual arts can serve many purposes, including social and personal communication. The visual arts, whether they are direct or indirect images of specific things, ideas, or feelings, can make the ineffable communicated among people, and this makes the visual arts unique and important. As mentioned in the previous chapter, verbal language has its limits because the world

does not begin and end with what can be described. Visual art is often able to show expressively what can elude verbal description.

Written texts and the visual arts are preserved expressions and can be enjoyed and experienced repeatedly. There is an important relationship that develops when these two forms of expressions are used together in a picture book. According to Olsen (1992), they are two sides of the same coin – each contributes to the value and purpose of a story. This link between the two forms of messaging allows for the formation of a full and well-rounded form of expression. It also encourages authentic communication that allows one to communicate more than what one is capable of in words alone which could be important for those with a limited vocabulary or verbal language capabilities. The easier one can communicate with others, the easier it is for others to understand the individual. Moreover, as one communicates with others, he or she obtains reactions from others thus growing consciously aware of oneself and of others (Taylor, 1989).

Language and Visual Art

Researchers Gail Neu and John Stewig (1991) base their research on the hypothesis that children use drawing as a rehearsal and scaffolding technique while learning to write, read, and comprehend language, to decode words and understand story-language patterns, and to generate and organize ideas for reading and writing. Numerous studies provide support for their hypothesis including Graves (1983), Hennings (1986), Rhodes (1988) and Dudley-Marling (1988). While this remains a hypothesis, I believe that it does have value and is highly possible. Neu and Stewig (1991) have shown in their research that drawing and language development skills are linked and explain that children use drawing to “unblock and extend (their) potential abilities to assimilate and synthesize language” as well as for artistic expression and emotional enjoyment (p. 48). This is important because as children practice drawing, they are, learning to express themselves through images.

Bob Steele, the founder of The Drawing Network in British Columbia, argued that children use visual arts as a language medium. Young children from about the age of two, draw as though using language. Like any language, he notes, “drawings record emotions and feelings, articulate thoughts and perceptions; embody a reaching out to

relate to the world; speak of a conscious or unconscious need to communicate” (Steele, 2008, p. 1). This is shown in pictures organized in sequence (story telling); poetic and metaphoric imagery; diagrams that analyze and explain and graphic images that compare, categorize, evaluate, express feelings and emotions, describe from observation and memory, and demonstrate fantastic invention (Steele, 1998).



Fig. 7

I have also encountered these experiences during my teaching career. For example, Figure 7 shows “Happy Snail”, a drawing about a dream that a 4-year-old had. While he had difficulties telling me what happened in his dream, it was easy for him to draw the dream and express his ideas and feelings through the image. He used visual art as a language. Instead of using the alphabet to write words, Trystan used other symbols for others to read. As Kress & van Leeuwen (2006) show by applying syntax to

visual art, the images can be read by looking at the visual grammar that is shown. The happy smile, the size of the snail, the patterns and the bright colors in the image capture the essence of the dream and helped him express his thoughts and communicate the dream visually. Moreover, like Langer explains, the sum of all the parts together create the effect and communicate Trystan's ideas. It is not just the shell, the colors, the shapes, it is the effect of the whole its expressiveness of the image in its entirety that helps to convey his thoughts and feelings.

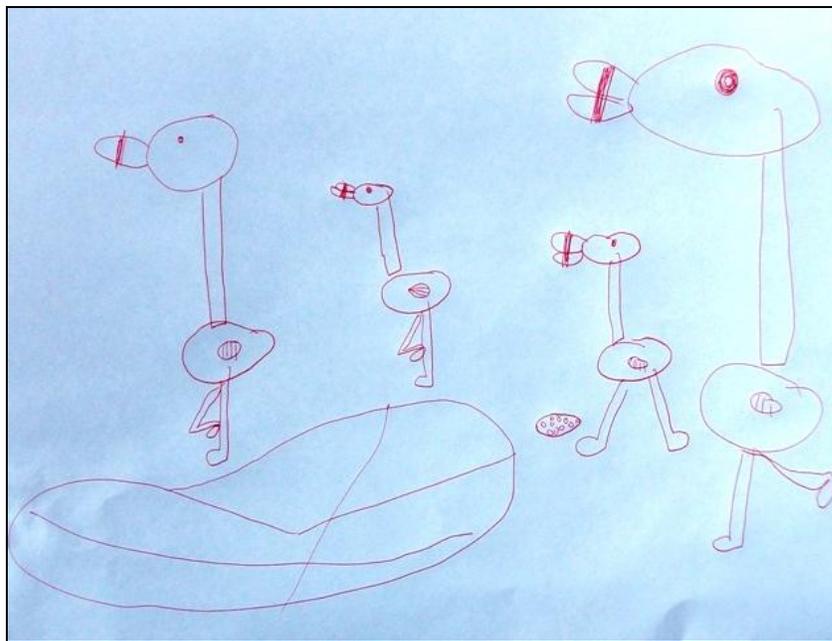


Fig. 8

Another example is Figure 8, called “Flamingos”, a drawing created by a 6-year-old after a visit to the zoo. While her drawing lacks the symbolic pink colors of flamingos, it does show images of birds in different stances. The various shapes and sizes act like words, defining the flamingoes and their very nature. As Wittgenstein (2001) states, “the meaning of a word is its use in the language” (S 43). In other words, it is not the single word that is meaningful, but rather the way the word is used in a sentence. The various elements in the image act similarly in that it is not the specific

shapes and sizes but the way they are used in the image overall that give them, and the whole image, meaning. The subtle differences between the flamingos act like adjectives showing, explaining, and describing variations. According to Steele (1998), details in drawings and a careful use of the elements of design such as in these images show the hallmarks of language, as children can articulate, express and communicate their thoughts, perceptions, feelings and creative imaginations through their artwork.

Steele (2009) has also found that children use words not just to convey practical messages, but also draw to articulate and express complex and subtle perceptions, thoughts, and feelings. He argues that children could not achieve a similar level of language articulation and expression using words alone. This is important from an educator's perspective because what one person may be able to communicate verbally another may not, and creating visual artwork may aid in communicating thoughts and sharing experiences and ideas. Fransecky and Debes (1972) add that students in visual literacy projects often suddenly sense "a new power, a new language facility, that they haven't felt with words" (p.7). Visual projects are often driven by emotion and passion, the arts can offer a unique means of knowing, thinking, and feeling based in imagination and cognition (Cornett, 2003). In addition, teachers can check understandings through visual artwork and ensure that children are learning concepts correctly, even when they find it difficult to verbalize them. While teaching early elementary children, I found many young children did not have the verbal vocabulary or ability to fully articulate their experiences or emotions. However, they were able to draw or paint a picture illustrating their experiences, and then use the picture to talk about their experiences. Students' images can also aid in directing teacher questions, helping to draw out student knowledge about a particular subject.

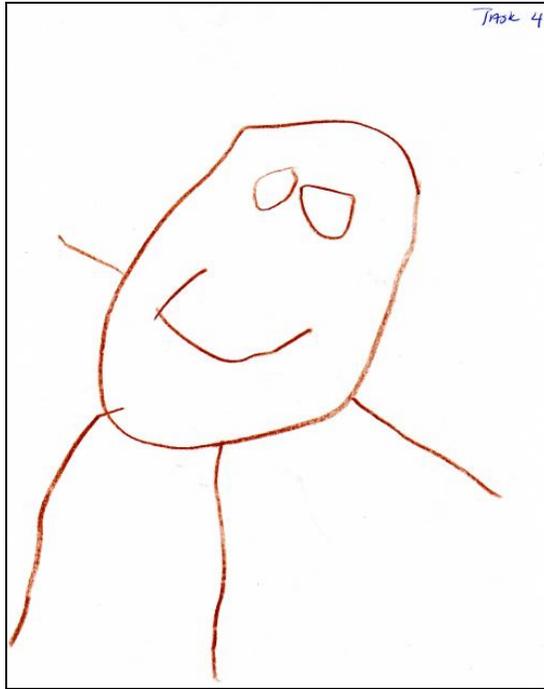


Fig. 9



Fig. 10

One example of such an occurrence was when I asked a mother, Joanna, to read the story of the Gingerbread Man to her two children who were ages three and four. Afterwards, when she asked them about the story, they both said that they liked it. She couldn't get them to elaborate on the story or explain why they liked it. Then she had them draw a picture of the gingerbread man. She was surprised at the two very different drawings. Malachi, the younger child, drew a picture of the gingerbread man smiling. Shayla, the older sibling, created an image of the gingerbread man frowning. Joanna examined the drawings and rephrased her questions. Malachi explained that the gingerbread man was having fun because he was running and being chased. However, Shayla explained that the gingerbread man was sad because he was being chased and that the gingerbread man did not like to be chased. Drawing the pictures helped the children think about what took place in the story. It gave them time to contemplate the events, process their thoughts, and express them in a concrete way. This helped them move from a simple "I liked it" response to a more in-depth and thoughtful one. Drawing the images also helped Joanna understand the children's thoughts and directed her in her questioning. Before the children created the pictures she did not know which direction to take in her questioning. After examining the

children's images she was able to direct her questions toward the images and ask more suitable questions for each child, such as drawing out their thoughts and feelings toward the story. Although this session was conducted at the children's home, similar exercises can easily take place at schools. Teachers can use the same techniques and encourage children to create drawings to help them verbalize their thoughts, and can also use the drawings as a guide to their questioning techniques.

Not only do illustrations aid in the communication process between two people, that is, helping the transmission of an idea from one person to another, but they also create a more immediate communication as well. For example, let's say that person A wants person B to understand that he has a new pet dog. If person A shows person B a photograph of the dog, person B will immediately "understand" or have a good concept of the dog. He will immediately understand the size, the breed and the color. He may not immediately know the gender or the name of the dog, but this is unimportant for B to develop a basic understanding of the dog. In another scenario person A calls his friend on the telephone and explains that he just bought a dog. At this point the friend cannot fully picture the dog. Only after more details are revealed through the use of verbal language can the friend begin to fully appreciate the dog. Moreover, person A must provide the right details and enough details for his friend to come to the same or an equivalent understanding as seeing a photograph. Person A must use verbal language to show, or form a mental image of, the dog. Seeing an image of something is much more immediate than engaging in a conversation. Moreover, this form of communication may be easier for one who does not have the verbal capacity to fully describe the dog and use language to show rather than tell.

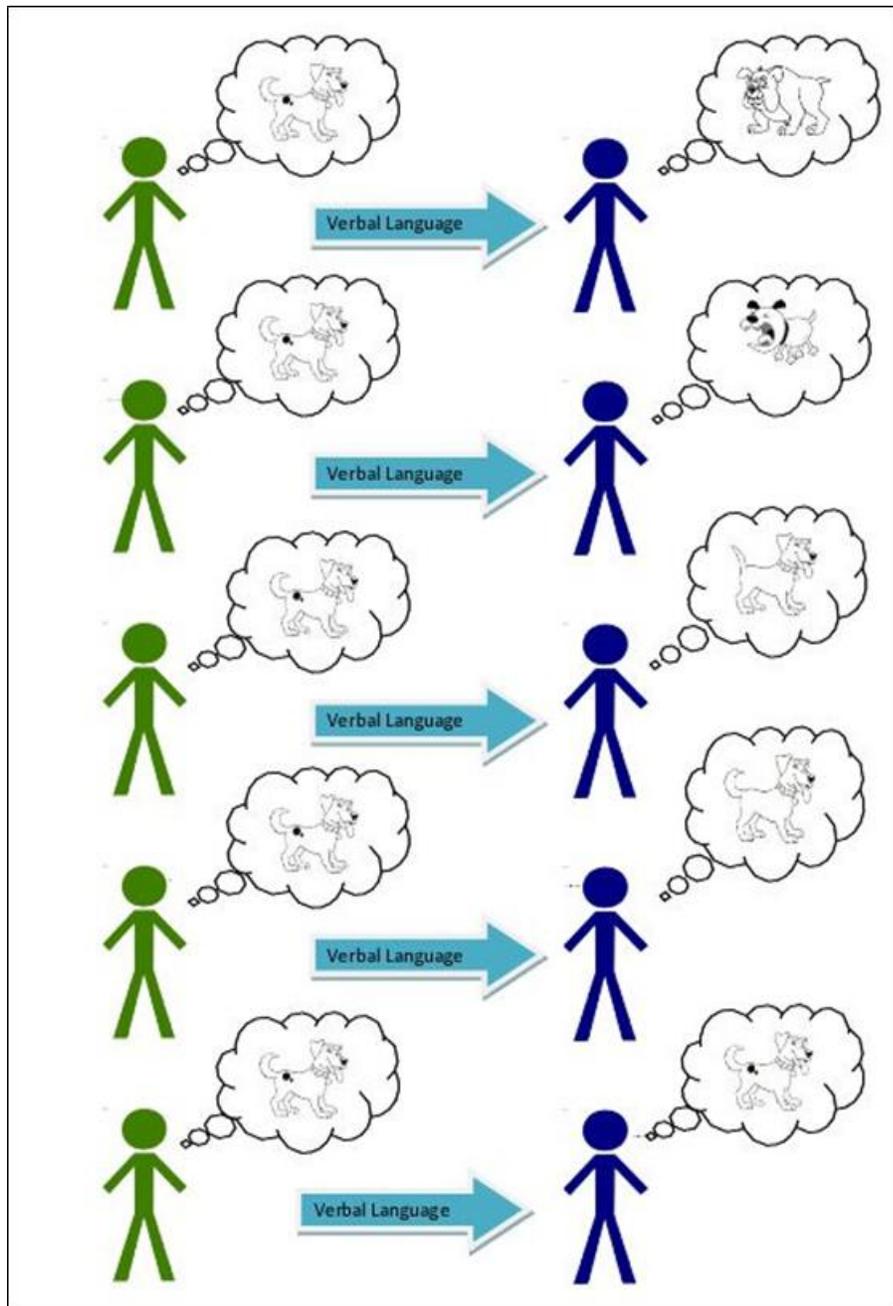


Fig. 11

This image is an example of what the previous paragraph explains. The reader can understand the concept much faster by looking at the image than by reading the previous paragraph (231 words), or by engaging in the actual conversation about the dog.

Not only can creating visual art aid in the development of language, but learning how to view artwork critically can also aid in its progression because it encourages viewers to examine and interpret visual artwork in terms of the elements and principles of art. Edmund Feldman's (1973) approach to art criticism encourages viewers to systematically interpret visual art by going through four categories: describing, analyzing, interpreting and evaluating. Students, including young Kindergarten students, are first encouraged to describe the artwork in as much detail as possible and then analyze and compare those details. Specific relational vocabulary, such as to, on, at and above are used repeatedly when examining visual artwork and details are described and considered closely. This specific vocabulary is especially important because, according to Jerome Bruner (1966), these types of words are usually the last to enter the student's vocabulary. According to Edmond Feldman and Don Woods (1981), these words often are problematic for the student when "the child is making the often difficult transition from the iconic to the verbal-symbolic stage – typically when the child is learning how to read-at ages five through seven" (p 79). Learning and using these words in a visual context could help students use them later in a textual context. In the final categories of Feldman's (1973) method, interpretation and evaluation, students are led to higher levels of meaning-making. According to Feldman and Woods (1981, p 79), some of the complex cognitive skills that are involved include drawing inferences about what the work means as a whole, hypothesis testing to see whether a tentative interpretation fits the facts, creative problem solving when trying to synthesize interpretations, and deductive and inductive reasoning to support their decisions. These are similar to the processes involved in reading and making sense of text.

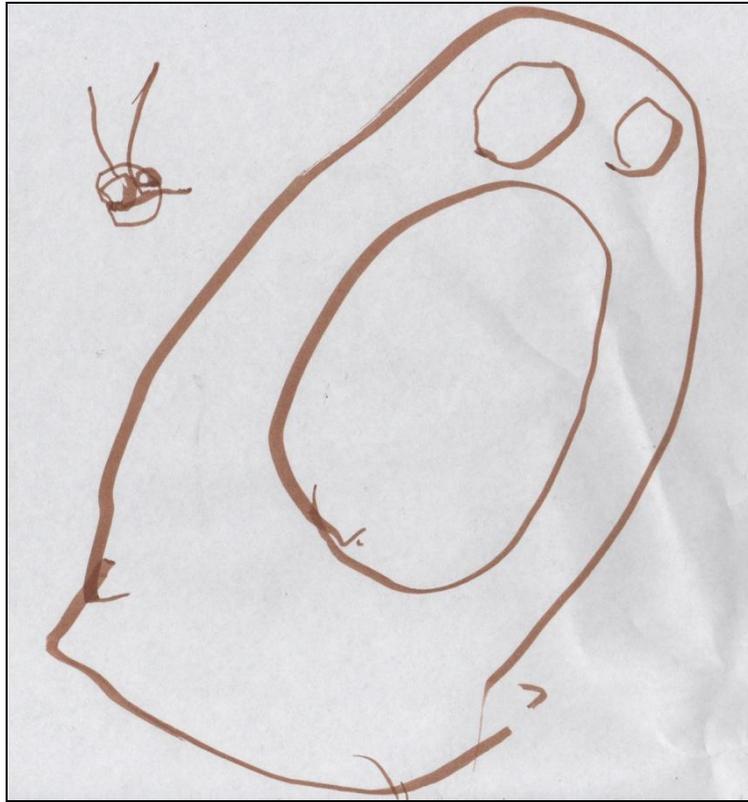


Fig. 12

Practicing visual literacy can aid in developing language abilities in various ways. Children can create visual images to explore language, to understand language, and to communicate with drawings as a language. Visual images can be used to direct language use, help children practice verbal language, and to communicate in a more full, rounded manner. This can be seen with the above picture called “Humongous Whale”. Around the time Taryn drew this picture, her favorite song was “*Slippery Fish*” by Charlotte Diamond. One verse was about a humongous whale. At first Taryn did not fully understand the meaning of the word “humongous”. After we talked about the word she drew this picture showing the humongous whale contrasted with a tiny bird. She showed me the picture and explained the characters. She continued to sing the song, adding her own verse about a tiny bird. Creating the drawing helped Taryn understand the word and encouraged her to play with the words in the song. While participating in visual literacy projects students have opportunities to practice the various components of language including communication, forms of language, purposeful verbal interactions,

and even play with language. Word meanings and words in context can be examined as students change verbal words into graphic images. As children draw, opportunities to talk about encoding ideas, integrating words in context and examining similarities and differences with other images and texts, may also arise. Opportunities to examine ideas more specific to reading may also present themselves such as the use of quotations, pronouns and adjectives. Moreover, children have the opportunities to communicate ideas and feelings that may be more difficult to explain with words alone.

Memory

Another field that draws parallels between language and visual images is psychology. While it is beyond the scope of this paper to examine memory and how it functions in detail, it is worthwhile to look briefly at Paivio's theories on dual coding because he examines and compares the roles of language and images in memory and making meaning. According to Paivio (1971), pictures are meaningful at both visual and verbal levels in that they spark both a concrete memory representation (image) and a verbal label. He also explains that the verbal process is slightly less available when interpreting images because an extra transformation is needed through an associative process triggered by the image. This occurs with both concrete and abstract images. When examining memory and meaningfulness from a verbal perspective he explains that verbal codes are readily available at all times with concrete words being more likely to evoke images than abstract words because of their high referential meaning. Overall this means that when a person is given an image to look at (as opposed to concrete or abstract words), the summative availability of both forms of coding are at their highest; visual and verbal processes are available and function simultaneously. As Sandra Moriarty (1994) explains, Paivio's work shows that "although independent, the two subsystems are also interdependent so that a visual concept can be converted into a verbal label and vice versa" (pg 21). These theories have direct implications for using images to form a base for literacy development. Practicing visual literacy and examining images should also encourage students to convert visual concepts into verbal labels, thus exercising language processes needed during reading.

Learning Through Art: A Guggenheim Study

The Learning Through Art (or LTA) study, developed through the Guggenheim Museum in New York, was based on the idea that literacy skills, including reading, writing and language skills, can be influenced through participating in the arts. Although the study focused on viewing and discussing art in a gallery and text in a book, the same techniques can be applied to viewing and discussing artwork and images in picture books.

The original program, called *Learning to Read Through the Arts*, began in 1970 and has involved more than 130,000 students. In 2005 the museum discovered that very few large-scale statistically sound studies were conducted that examined the arts and literacy. Since the Guggenheim wanted to show the importance of the arts and the effectiveness of an art museum, they decided to run a carefully planned, large-scale study. It was very carefully and professionally designed to determine whether any relationships could be drawn between participation in the Guggenheim program and students' literacy abilities. Students were from similar socioeconomic backgrounds and had similar academic grades. Students in the control group were not taking fine art courses elsewhere. The study examined student discussions concerning a piece of art (Arshile Gorky's *The Artist and His Mother*, 1926) and an excerpt from a book (Cynthia Kadohata's *Kira-Kira*, 2004). A verbal method was specifically chosen so that language skills could be highlighted, not just reading and writing skills.

In July 2006 the Guggenheim released the results from its first year of study. After participating in the study, students were interviewed and tested. Word count and content was measured in terms of literacy characteristics including hypothesizing, providing multiple interpretations, extended focus, schema building, giving evidence and creating thorough descriptions. They discovered that, unlike the control group students who were not in the program, the program positively impacted the third graders who participated in the Guggenheim study. Five of the six literacy skills examined were positively impacted when the students participated in the visual art portion of the study including being better able to maintain focus, hypothesize, show evidential reasoning, build ideas, use thorough descriptions with more words, and interpret the images in multiple ways after participating in the study. After participating in the program students

also showed more positive attitudes towards art museums and maintained a better ability to problem solve while creating artwork than those in the control group. All of these abilities are important in print literacy as well as visual literacy.

2. *Decoding and encoding*

Visual literacy and print literacy are two different communicative systems that are similar in the way they are processed for understanding. Both words and pictures are processed in sequential stages. Sinatra (1986) suggests that picture comprehension and reading comprehension are analogous in cognitive processes. Both processes require readers to transpose coding cues to appropriate meanings. Both require readers to understand that objects can be coded in different ways such as through words or pictures. Finally, both require active and receptive processing of information. In addition, according to Winn (1990), the first stages in interpreting both text and pictures are “automatic and are beyond the willful control of the viewer.” This means that people first see lines, textures and values, and automatically separate objects from one another and their backgrounds. Once we consciously attend to these elements we analyze them in greater detail as images or letters forming words.

As Purcell-Gates (1997) says, “you can't read unless you look at the print and recognize the letters and then recognize the words”. This statement highlights just how important symbols are in reading and interpreting text, a factor that is often overlooked when examining reading.

According to Perry Nodelman (1988), picture books are full of symbols which he defines as “the habit of mind through which physical objects come to represent abstract ideas other than their actual selves” (p. 106). He states that “illustrations in the picture books imply and are sustained by many different codes of signification – orderly structures of meaning that are actually unspoken texts” (p. 103) However, in order to interpret the symbols we need knowledge of their existence and experience interpreting them. Although this could be difficult for children, Nodelman explains that young people who are “provided with both the general information that symbols exist and specific information about the meanings of particular visual symbols will have the tools to appreciate the otherwise hidden subtleties of many picture books” (p. 107). I believe

that teaching children about these symbols can provide them with helpful experience and general knowledge that could be beneficial when experiencing alphabetical symbols in the future.

Exploring today's English language system does not readily show the relationship between the language, its symbols, and visual pictorial cues. However, examining the initial stages of our system illustrates the relationship between the arts and literacy more easily.

BIRD					
FISH					
DONKEY					
OX					
SUN					
GRAIN					
ORCHARD					
PLOUGH					
BOOMERANG					
FOOT					

Fig. 13

Egyptian	Protosinaitic	Phoenician	Early Greek	Greek	Latin
					A
					E
					N
					O

Fig. 14

The beginning of our phonetic system five thousand years ago began with the great oriental systems such as the Sumerian, Egyptian, Hittite, and Chinese word-syllabic systems (Olsen, 1992). Many of the pre-writing systems included the picture and the logogram as well as picture illustrations. One of the most well-known examples is the Egyptian language that used pictographic writing that helped in setting the course toward today's phonetic writing. For example, a picture of a hawk came to represent the sound that started the word "hawk." A picture of a thing became a picture of a sound (Sheridan, 2005). Examples of these systems are shown above. Another example is the Greek alphabet, which was the first complete phonetic system where each sound had its own symbol. This provided a direct link between the pictures and sounds. Chinese and Japanese language systems also show an actual visual correspondence between what is written and reality (Olsen, 1992). From an Eastern point of view, separating the visual from the verbal, such as in our phonetic system, is unnatural because they believe that words and pictures should be closely combined together.

Instead of direct links between the words, images and sounds, in the English language words and visuals serve as substitutes for something else, otherwise known as a referent. As Molitor and his colleagues (1989) explain, both text and images provide visualizations of reality which are not immediately present or accessible in one's direct experience. For example, if I want my colleagues to understand what my new car looks like, but my car is not close by, I can either describe the car using words or show my colleagues a picture of my car. Both methods serve as a medium that visualizes parts of reality that are not immediately present. It should be noted that, obviously, the degree of similarity of words and pictures to their referents differ. Hunter and his colleagues refer to this as "referential representationality" (Hunter, Crismore & Pearson, 1987). In other words, in some cases, pictures can more easily resemble their referents and thus they can both present similar visual stimuli, whereas words do not or take longer.

Although Hunter and Molitor explain the idea of referents in detail, they allude to the idea that a referent is a solid, tangible object. However, as all artists know, a visual art image is not always of a particular object such as in the case of abstract art or an imaginary portrait. According to Barkan (1995), the creative experience in the visual arts provides a vehicle for social communication through which the artist embodies his intuitive and intellectual insights into a unified aesthetic form. These can be direct or

indirect images of specific things, ideas, or feelings. These pictorial forms are full of symbols of the experiences the artist takes part in and these enable the artist to share them with other people (Barkan, 1955). As explored in chapter 2, visual art is a language and the artist uses elements of art, including line, shape, color, texture, form and value, as well as the principles of art, including balance, harmony, perspective, movement and unity, to create visual artwork, influence its impact, and evoke various feelings and ideas.

In fact, even when recreating images of concrete objects that the artist can see, artistic representations can never portray absolutely everything the artist sees. According to Gombrich (1960), the artist begins with schemata, a term that Gombrich uses to describe the mental rules that sort the information that the artist sees to determine how he or she should portray the visual stimuli. Then the artist uses a visual language, like a code using the elements and principles of art, to articulate what is perceived. The artist corrects his or her work as it is created in order to conform to the particular instance. The result is an image that is “not a faithful record of a visual experience but the faithful construction of a relational model” (Gombrich, 1960, p. 90). In other words, the artist uses a visual language to create a model of what he perceives.

Although a dictionary doesn't exist to define all of the many forms of meaning found in visual art, there are some principles that hold true for many images that can help one read and interpret the image in terms of content and emotion. Molly Bang has outlined several of these principles in her book *How Pictures Work* (2000). She explains that smooth, flat, horizontal shapes tend to give the viewer a sense of stability and calm, whereas vertical shapes tend to be more exciting and imply energy. Diagonal shapes are often dynamic and imply motion or tension. Bang (2000) gives an example of how a simple triangle can imply different ideas, depending on its position; a triangle on its base gives the feeling of stability, whereas a triangle on a diagonal gives a sense of movement as it seems to teeter on its point. Changing the position of objects on the paper also changes implied meanings. For example, objects placed on the upper half of the paper tend to be correlated with freedom, happiness and spirituality whereas objects placed on the lower half of the paper tend to be correlated with feeling of being threatened, heavier, or sadder. Light colored backgrounds tend to be interpreted as being safe whereas dark backgrounds tend to portray fear or the unknown. Also,

viewers tend to interpret pointed shapes as being scary and rounded shapes as more secure and comforting.

The Scribble Hypothesis

As mentioned previously, drawing is a way to develop visual literacy. Creating scribbles and drawing images go hand in hand. As one experiments with a pen or pencil, as one scribbles, one learns how to create various images and use different symbols that are used in the process of communication. Scribbling, sketching, and drawing all help one to make sense of symbols and abstract referents. As children draw they begin to realize that what they draw may not look exactly like the intended objects and instead become comfortable with the drawn images acting as symbols of their referents.

Susan Sheridan is a researcher interested in the value and purpose of young children's scribbles and drawings and has studied the neurological link between children's drawings and the development of the human brain. She explains that since children scribble and draw before they speak, and there is an important link between drawn images and written symbols (Sheridan, 2002a, 2002b). According to Olsen (1997), "the picture is the child's beginning of written language" and "children develop a mastery of written language by integrating their pictures and words" (p. 127).

Sheridan developed a marks-based theory, called the Scribble Hypothesis, which is based on the premise that scribbling prepares the brain to become literate. She argues that scribbling can also be a way to develop a foundation for reading. Her hypothesis recognizes the importance of drawing and scribbling as a means for the brain to learn language. According to Sheridan, scribbling and drawing act like thermostats, heating or speeding up brain frequencies for easy word-retrieval in speech, as well as for reading and writing, then cooling or slowing down brain frequencies to achieve efficient resting states via marks-based resolution/understanding (Sheridan, 2005). She also states that sustained visual attention is needed for speaking, as well as for drawing, reading, writing, and other marks-based expression. She concludes that the work of the hands creating marks extends the attentional capabilities of the visual cortex for language (Sheridan, 2005).

The Scribble Hypothesis is a theory based on the idea that scribbling prepares the brain to become literate. It reveals that the marks people make, also known as scribbles, affect symbolic thought, which includes reading and writing. Basically, as children scribble, their physical and mental gestures become visible and they teach the brain to be responsive to its own symbolic needs through self-reflection (Sheridan, 2005). The first four tenets of the scribble hypothesis are as follows:

One: Very young children's scribbling trains the brain to pay attention and to sustain attention, setting up self-organizing feedback loops between the eye/hand/ear/mouth and the inter hemispheric brain.

Two: Very young children's scribbling stimulates individual cells and clusters of cells in the visual cortex for line and shape.

Three: Very young children's scribbles help them practice and organize the shapes or patterns of verbal and visual symbolic thought.

Four: Very young children's scribbling encourages an affinity, or love for marks, preparing the mind for its determining behavior: literacy.

Rhoda Kellogg (1973) argues that a child's early scribble pictures are important and meaningful because they hold the key to the development of an extensive graphic vocabulary . She analyzed children's drawings and developed a series of twenty scribbles that are the building blocks that underlie graphic development, as shown in appendix C (Golomb, 1992, p. 13). This type of mark-making is an important initial step in the development of visual literacy.



Fig. 15

Another example can be seen with the example above in Figure 15. When Taryn turned 2 years old, she drew a picture, which at the time looked like a series of scribbles. It wasn't until Taryn insisted on taping her masterpiece to the cupboard with her older sibling's pictures and exclaimed "that's doggy!" that we understood her intentions. At the time she was practicing lines and shapes, organizing her thoughts, encoding her ideas and communicating her love of dogs. Moreover, she created the dog intentionally and proudly categorized it as a piece of art belonging with the other drawings on the wall. Over time, we realized that every time Taryn drew a spiral shape she called it a dog. She did not mind that the spirals did not look like real dogs and was comfortable using the spiral as a symbol.

Overall, drawing and scribbling, a form of visual literacy, helps to develop a graphic vocabulary, visual language and verbal language. It also helps one directly practice encoding and decoding symbols. These steps show that by preparing and training one to create, use, and understand marks, and in such a way practicing visual literacy in this manner can help prepare students for literacy development.

Decoding an image goes hand in hand with comprehension. Describing the image and its elements is the first part of decoding, including looking at an artwork and examining it from different perspectives. This begins by physically moving around the artwork and looking at it from different angles and ranges, examining and describing the shapes, colors, values, and other artistic elements in detail. Decoding moves toward comprehension when one begins to examine the artwork from different mental perspectives, asking oneself questions such as what does this shape mean and *what else* could this shape mean? Or, is this picture really what it seems to look like, say a beach scene, or is it really just a bunch of dots? The following section provides more detail about comprehension.

3. Comprehension

Developing visual literacy relies on examining, interpreting and discussing visual images. Barkan (1955) explains that artwork is full of symbols of the artist's experiences and the art is the medium through which the artist communicates his or her experiences. I believe that this is similar when an artist is creating illustrations for a picture book. However, instead of sharing personal experiences with the viewer, the artist attempts to share experiences of the characters in the story with the viewer. But in order to understand the symbols that the artist uses, visual literacy skills must be practiced.

The first step is developing perceptual skills by interacting with the visual arts, such as identifying a figure from its background. This is important for being able to identify written symbols on a page. Taking the interactions to the next step in developing visual literacy is also important. This "fosters (the) development of students' critical-thinking skills, including skills for describing, analyzing, interpreting, and making judgments and thoughtful responses to creative works" (Rationale for the Fine Arts Primary Program, BC Ministry of Education 2012). As we use our visual literacy skills and interpret what the artist has created and the meaning behind the work, we create new understandings and develop our comprehension abilities. Being able to understand symbols and comprehend them helps to develop a solid foundation for literacy.

Lance Gentile and James Hoot are two researchers/teachers that strongly argue for the value of play in kindergarten programs and they also argue that play can nurture

children's ability to learn to read. What is interesting is they discuss painting as one type of play that is important. They argue that creating and discussing paintings can help children identify and create patterns and symbols, and become aware that images on paper are meaningful and say something (Gentile & Hoot, 1983). Furthermore, by doing so, they are developing children's visual literacy skills. They state that "many children who have difficulty learning to read have never grasped the link between spoken and written speech" and argue that this is why printed messages are meaningless to these students and interacting with paintings helps to bridge the gap (Gentile & Hoot, 1983, p.436).

It must also be noted that selected images in picture books can also develop comprehension in another way. As children use their visual literacy skills to understand the images, they can put the images together and develop understandings of the story as a whole without the text. This is something that cannot be achieved when practicing visual literacy via other methods, such as interacting with visual art at a museum. Images are carefully chosen and put together in specific ways in order to tell a story in picture books. Children may come up with the same story that is told in the text through the images, or they can interpret the images and come up with a story that differs from the actual text. Being able to practice story comprehension through images is another reason why I have chosen this particular method for developing visual literacy as a way to pave the way to a strong literacy foundation for young children.

Other factors that contribute to comprehension abilities are creativity and problem solving skills, being able to integrate concepts, and engagement with the task at hand. Being able to read involves creativity and problem solving skills. Students need to be able to figure out what new words mean by thinking creatively at times and using and applying different strategies. Numerous studies have concluded that strong arts curriculums, including those that develop visual literacy, raise standardized test scores and encourage students to practice essential creative and problem-solving skills necessary for tomorrow's workplace (Popiolkowski, 2005). While I am not sure if I agree with the claim that arts curriculums raise standardized test scores, I do agree that arts curriculums aid students with their creative and problem-solving skills. According to McCarthy et al. (2005), the visual arts also aid traditional academic studies by encouraging students to engage in their work. I agree with this claim as I many of my

own students have been more interested in their work when the visual arts have been included somehow. For example, many of my students preferred books with lively and colorful pictures in them and were always excited to create drawings and paintings to include with their written journal work. Finally, transferring knowledge, also referred to as bridge building, helps to integrate concepts between subject areas. As Stravolopoulos (1997) explains, when previously synthesized material from one's learning situation aids in the successful understanding of another, deeper understandings are developed. Deeper understandings such as those that may occur when concepts overlap between the visual arts and reading have implications for literacy development.

These "deeper understandings" can come about in different ways, depending on the situation. The following three examples illustrate how diverse the methods and situations can be that aid in synthesizing material. The first example involves young students creating illustrations in their own alphabet books. This project allows students to think about the letters and their sounds and choose their own object to exemplify the concept. Drawing the picture encourages the student to practice and think about the information and solidify their knowledge regarding alphabet recognition and phonics. Moreover, as the student draws the image, he or she must make choices on how to code (draw) the information. Say for example, the student chooses "h is for happy". How is he going to draw "happy"? He could choose a happy face – two dots for eyes and an arc for a smile – to represent happiness. Or he could choose to paint the picture with reds, yellows and oranges, bright colors that he associates with happiness. Either way, the student chooses something to represent happiness, similarly to words representing objects or feelings. The student practices using symbols and referents to communicate, a process used in both art making and reading.

Another example can be seen with students' approaches to viewing images. In some cases students need to look at the artwork carefully, finding clues hidden in the image and using existing information to determine what it is or what it could be. Similar processes are used when reading. When coming to new words, students need to examine the sentence carefully, looking for context clues and phonetic clues to determine what the word means or could mean. Problem-solving approaches can be transferred between subject areas in this way.

Another example is when a student learns a concept while creating drawings and then applies it when writing stories. When I taught grade 1 I often included a lesson called “Mistake Paper” in my September schedule. I began the lesson handing out a piece of paper and explained that the students were required to draw a picture on it. As I handed out the paper I pretended to notice a mistake that the photocopier made on the paper, usually a thick, black squiggly line. The students were then required to include the “mistake” in their drawings. At the end of the lesson we would hang up all of the drawings and talk about them, noting how they were all different, nobody was “wrong” in their drawings, and how the mistake made the pictures interesting. Students learned that making mistakes was not a bad thing and incorporating the mistakes sometimes resulted in something new, exciting and perhaps even better than the original idea. Later in the semester I usually had a few students who had a difficult time with writing. The two main problems I encountered were students who could not write a whole story because they were too concerned with perfect letter formation, and students who could not write a story because they could not explain their ideas “perfectly”. I always referred back to the Mistake Paper lesson and reminded the students that the letters do not have to be written perfectly or the words do not have to be perfect in order to write a good story. The students remembered that mistakes are acceptable. In some cases the students’ imperfections resulted in an interesting story-telling method, with their voice shining through.

Creativity, problem-solving, communication, using and interpreting the language of art are all factors that contribute to comprehension in another way as well. As noted in chapter 2, I borrow from Dewey (1933, p 137) and call them “facts” that contribute to knowledge development, which in turn become understandings that transfer from the visual arts domain to language arts domain.

A Formal Analysis of Artwork

There are specific steps and concepts to consider when formally examining visual artwork. Viewers can “tease apart” and make sense of images by examining the image on three different planes, including the semiotic, iconic and thematic planes. Although formal analysis is usually used in the visual arts field, it can easily be applied to

visual illustrations and aid comprehension as it goes hand in hand with decoding and encoding.

In the first plane of formal analysis the viewer considers the elements of the artwork and every part of the artwork is considered to potentially convey meaning. Every aspect of the image contributes to the meaning of the artwork, whether it is the color of a t-shirt or the presence of a balloon in the sky. Analyzing the artwork at this level includes examining many of the elements deeply. For example, a surface analysis of a cloud could include its shape and color, but a deeper analysis would include the texture, density, porosity, stroke lines and their meanings as well. Moreover, the elements should be examined interactively rather than sequentially. In other words, materials and techniques go hand in hand with the meanings they signify and should be examined together (Llamzon, 2009).

The second plane of analysis fits well with representational artwork and considers the image itself. According to Llamzon (2009), this includes the presentation of the figure(s) relative to the viewer, it's positioning, and the meanings the placements convey. Questions that can be asked at this stage of analysis include ones such as: "How would the meaning change if the animal was centered on the page?" or "Why is he looking towards the barn on the left?"

The third plane of analysis involves examining the historical and cultural influences. Certain social, economic and political occurrences can influence the visual arts. In this stage the viewer needs to know the artist's background, the ideologies and concerns of that particular period. Being aware of this information can contribute to comprehending the meaning of the overall image.

4. Motivation, Aesthetics & Emotion

Many experts agree that motivation is a contributing factor in learning how to read (Wolfe & Nevills, 2004). It is difficult to get a child to learn something when he or she just does not want to. It is much easier for a child to learn something new when he or she is motivated to do so. I believe that visual literacy can be used as a motivator in developing literacy skills.

There are many attitudinal and behavioral benefits that occur indirectly by participating in the arts, including the visual arts. They can help to improve life skills such as working in groups, critical thinking skills, and self-criticism, and develop pro-social behaviors and attitudes among “at risk” students such as by building social bonds, working with mentors, and improving self-images (McCarthy et al., 2005). It is reasonable to assume an improved overall self-concept, self-esteem and morale can lead to an overall improvement of self-expectations, goals and positive behavior, encouraging and motivating students to improve their literacy skills. This is evident in the highly successful DREAM (Developing Reading Education through Arts Methods) project that is currently in place in schools in San Diego. Ariana Castillo, a 9-year-old student in the program, said that the lessons erase her self-doubts about learning and exclaims “It just makes me forget about all the voices in my head that say 'You're not good for anything,'" and I just believe in myself" (Brennan, 2012).

Picture books are also a form of art work themselves. As pieces of art, the images themselves evoke aesthetic and emotional responses and favorite picture books often stay with us throughout our childhood and well into adult years. Like many forms of art, adults and children are drawn towards picture books with the expectation that the experience will be rewarding, pleasurable and meaningful. Art experiences for both the artist and viewer can result in a sense of satisfaction and pleasure, and add value to people’s lives. This often occurs in the artwork in picture books. Illustrations are rarely superficial. Instead, they almost always carry a great deal of integrated information, thus encouraging meaning making and questioning through aesthetically pleasurable, emotion-provoking experiences, even in the case of seemingly simple drawings. Take, for example, the Elephant and Piggy series by Mo Willems. These stories include simple line drawings of friends elephant and pig. However, the stories and drawings are memorable and carry meaning because they evoke emotion, interest and further questions. *There is a Bird on Your Head* (2007) contains repeated images of a nest on the elephant’s head. Children are drawn to the humor and ask questions such as: Why is there a nest on his head? What will happen to the birds? Are there any eggs? Moreover, the feelings associated with the image contribute to its appeal. Viewing the illustration as a complete image, rather than a nest and an elephant separately, allows the viewer to see the individual aspects in context and experience them together as a

whole. As previously mentioned in chapter 2, we find meaning within the whole and reading for meaning involves the awakening of feelings and images (Huey, 1908). In this case the whole is greater than the sum of its parts.

Beyond these immediate effects, there are “personal effects that develop with recurrent aesthetic experiences, such as growth in one’s capacity to feel, perceive, and judge for oneself and growth in one’s capacity to participate imaginatively in the lives of others and to empathize with others” (McCarthy et al., 2005, p. 37). Practicing visual literacy skills by examining visual arts in picture books can be very rewarding, pleasurable and memorable. Because books are used to encourage visual literacy, students may transfer the feeling to reading in general, and thus be motivated to read even more.

Not only do visual arts benefit the students, they also benefit the teachers. It has been shown that the visual arts can improve teacher effectiveness and satisfaction, school atmosphere and community involvement (Bourland, 2005). Building a reading foundation by interacting with the visual arts and increasing visual literacy could also motivate the teachers. A fun, interesting and exciting approach could also motivate the teachers to develop a strong reading foundation in their students.

5. Experience with literacy in use

Having experience with literacy in use, in other words, seeing other people reading and writing, is an important factor prior to learning how to read and write for oneself. This is important because it can help children understand what literacy is all about, which generally consists of deriving meaning from and communicating with others using symbols. It can stimulate interest in literacy, help children recognize the alphabet, model to how to hold a book, show left to right directionality in reading, and give children examples of various types and sources of print that are available.

There are various methods of teaching visual literacy. Depending on the teaching approach, print literacy could be avoided altogether. In other cases, direct contact with reading and writing could be a “side-effect” of visual literacy learning. For example, a field trip to the museum with the intentions of examining the paintings could

involve the teacher reading maps on how to get to the museum, reading the itinerary at the museum, writing notes about the children and the paintings, and reading information posted about each artist. In other cases, the exposure to literacy in use may be directly related to the visual literacy learning. Such is the case with my preferred method of teaching visual literacy using the artwork in picture books (which is discussed further in this paper in the following chapters). The picture books directly demonstrate literacy usage to children. They can see the actual book, learn how to hold it, examine the images from left to right, and in some cases, look at the accompanying text. In a sense the child can participate in literacy activities without actually reading. Moreover, picture books can create layers of meaning sandwiched between the text and images, which, according to Arzipe and Styles (2003), creates an intimate interaction that is “open to different interpretations and which have the potential to arouse their readers to reflect on the act of reading itself” (p. 22).

6. Strategies of “Good” Readers

The best approach to developing a strong foundation is one that helps individuals develop the abilities needed for reading, participate in activities to cultivate required experiences, and practice habits of good readers.

As mentioned in the previous chapter, before learning how to read individuals need to understand and use language to convey thoughts, feelings and ideas. Written text is language written down, contains a message and follows certain rules such as left to right print orientation and top to bottom directionality. Individuals must be able to pay attention to detail, recognize, interpret and understand symbols. Students must also be motivated to learn new skills and participate in required activities.

Practicing visual literacy is one activity that pre-readers can actively participate in and practice the skills outlined above. Discussing images can aid language development, encourage attention to detail, and recognize and interpret symbols. Moreover, using picture books to practice visual literacy helps individuals experience books and rules of print. Practicing visual literacy can also help students practice the habits of good readers.

Adrienne Gear (2006) has outlined five important strategies that good readers use when reading. These are making connections, asking questions, visualizing, inferring and transforming. She explains that when students metacognitively use these strategies they can become proficient readers. While these strategies are very useful for readers making sense of the text they read, how can pre-readers prepare for these strategies? Practicing visual literacy can help pre-readers understand and practice the basic concepts behind these important skills, preparing them to become good readers later on.

Students make connections when the text they are reading reminds them of something they have experienced, their minds become flooded with memories, or when they make sense of the text in terms of events and people from their own lives. Pre-readers can easily practice making connections when they examine images and discuss how the picture relates to themselves. Illustrations can remind students of personal events and students can make sense of illustrations by thinking about similar situations they have experienced.

Gear suggests that students must ask questions when reading. She reviews the difference between quick questions and deep-thinking questions and explains that students should be curious readers that will lead them to a greater understanding of the text. Questioning can also be practiced with pre-readers when practicing visual literacy. Students can listen to and create simple questions such as “How did they draw that?” and complex questions such as “What is the meaning behind the dark blue color?”.

Gear also suggests that students should use their imaginations to visualize the text they are reading. This will help students combine their own background knowledge with the words of the author. Although an initial visualization is presented to students when practicing visual literacy, students can continue to use their imaginations and create further visualizations based on the initial image. For example, educators could ask questions such as “what do you think is behind the door?” followed by more specific questions like “What do you think it looks like?”, “What does it feel like?” or “What shade of blue is it?” to spark imagination and visualization techniques. Other literacy experts also agree that visualization is a key to literacy. For example, Goldstone (1989) states “the creation of mental images from the text is a mandatory process in acquiring literacy.

When the capacity for interpreting imagery is weak, comprehension is at best superficial. Without imagery, depth of meaning and richness of style is lost” (p 592-595). Moreover, Goldstone explains that illustrations offer concrete representations of metaphors, and picture book illustrations can promote understanding and use of metaphor. However this can only occur when the child has developed visual awareness to interpret, evaluate, and creatively construct meaning from the image. This is exactly what occurs when practicing visual literacy.

Gear’s fourth strategy is inferring, which involves encouraging readers to look for clues and fill in information that is not included in the text. Readers must discover and interpret information that is not included. This reading strategy can also be practiced during visual literacy exercises. Not all information is included in all illustrations and at times different information is often provided in the text and in the illustrations. Pre-readers must be able to infer information that they cannot read from the text by looking for clues in the pictures. In addition, students often need to make inferences and discover the meanings of colors and symbols to learn about characters in picture book illustrations.

Transforming revolves around the concept that what students read can change the way they view the world. Books can relay thought-provoking issues and students can look beyond the words to the implications the book may have. This is Gear’s most complex strategy, often used with students in higher grades. While images of homelessness and war may be thought provoking and transforming in nature, they may not be suitable for young pre-readers. However, other illustrations can still be used to encourage transformation and the way we see the world. One example is the picture book *Imagine A Day* written by Sarah Thomson (2005) and illustrated by Rob Gonsalves. This intriguing picture book can transform pre-readers’ thinking through its beautiful illustrations that seem natural at first glance, but prove to be impossible as the details are examined.

8. Story Structure

Stories in our Western culture have certain common elements. While it is not necessary for readers to fully analyze each element in order to understand and enjoy

every story, it is helpful to discuss a few elements to highlight certain key points in a story to aid in overall comprehension. These elements include setting (time and place), characters and character motivation, plot, theme, point of view, narrative voice and sequence of events including exposition, conflict, climax and resolution. A basic understanding of these elements and how they function together in a story can help in understanding the story as a whole. These elements can often be seen in the illustrations in a picture book. According to Graham (1990), picture books often convey emotions through themes, character, settings and story. Highlighting them and discussing these aspects can draw students' attention to the importance of these elements. According to Arzipe and Styles (2003), learning about narrative conventions such as these develops literary competence as children react to emotions and interpret complex picture books. Drawing illustrations can aid students in interacting with the elements and in applying them in their own stories, encouraging deeper understandings.

Transfer

While all of these skills are important to a literacy foundation, the reader might be wondering whether or not these skills can and will transfer from an arts based domain to a literacy domain. Although studies concerning transfer are difficult and rarely conducted well, I found several that show that learning in the visual arts can transfer to other subject areas in varying degrees.

Familiarity

Aristotle's examination of semantic theory in *De Interpretatione* addresses the question of what makes a linguistic sign useful, which ultimately addresses meaning. To Aristotle, meaning is created through the relationship between the signs and what they signify. In order for something to be meaningful, there needs to be some sort of familiarity with the object or potential meaning represented. If no familiarity exists with the meaning, then the relationship cannot be made and the object will not be meaningful. Aristotle (18a18-25) gives the example of the sentence "A man and horse is white". If the listener is not familiar with a "man and horse" then the term will not have any meaning for

the listener. However, if the listener is familiar with what a “manandhorse” is, then the sentence will provide meaning.

Like Aristotle, Paivio (1971) explains that the familiar “has meaning for the individual in the most elementary sense of knowing” (pg 54) and explains that familiarity implies that “some representation of a stimulus is available”, including images. He also explains that the “availability of representational process in response to a stimulus is the first stage in the development of psychological meaning” (p 54). In other words, if something is familiar then it will be more meaningful to the individual. If something is meaningful, then the individual will be more likely to pay attention to it, see its importance, and perhaps use it.

Aristotle and Paivio’s theories are based on meaning as they relate to actual things and ideas such as the words “table”, or “dog” or in Aristotle’s example, “manandhorse”. I believe that these theories can be extended to processes as well. Familiarity with certain processes and strategies could help students recognize them as being meaningful and important in other situations and encourage students to apply them, such as learning certain processes during visual literacy practice and transferring them to reading later on.

Transferring Skills: Visual Literacy to Print Literacy

According to Stravopoulos (1997), transfer can be defined as “the result of employing knowledge-seeking strategies to make connections between the characteristics of the artworks and the student’s accumulated knowledge” (p 242). Transferring knowledge, also referred to as bridge building, helps to integrate concepts. This is important because, according to Stravopoulos (1997), when “previously synthesized material from one’s learning situation aids in the successful understanding of another” deeper understandings are developed (p. 242). These ideas are mirrored in Howard Gardner’s multiple intelligence theory. These intelligences are closely related to one another, and many educators are finding that when an individual becomes more proficient in one area, the whole constellation of intelligence may be enhanced (Dickenson, MacRae & Campbell, 2004).

There are two types of skills transfer that need to be defined when discussing the transfer of skills between two subjects. These are in-domain and out-of-domain transfer. In-domain transfer, sometimes also called content transfer, refers to a specific transfer of skills from one type of task to another task within the same domain, such as a skill learned in drawing and transferred to painting. Out-of-domain transfer, also called context transfer, refers to a skill learned in one domain and transferred to a new domain. An example is learning a skill in Fine Art that is transferred to a new subject area like Social Studies or Language Arts. According to Eisner (2002a), for true transfer to occur, the student must learn a skill in one area and apply it to another area on his or her own. This means that the student must not specifically be taught how to accomplish the task successfully. This true transfer of skills is very difficult to demonstrate in any study, and is what makes the concepts of transfer difficult to study and establish.

According to Philip Yenawine (1997), it is likely that developing visual literacy can enhance the development of other meaning-making systems. As explored in the previous chapter, visual art is a language in itself and requires basic thought processes that are inherent in other forms of literacy. According to Fransecky and Debes (1972), “both visual and verbal languages involve thought processes which precede speech and writing” (p. 7). They explain that language has what they call deep and surface structures. Deep structures are a result of growth, whereas surface structures are the sounds and visual symbols that communicate. Fransecky and Debes (1972) continue to explain that “a good visual statement – a picture, painting, or film – begins with an underlying idea – a kind of deep structure – from which the communicator develops a surface structure visual presentation” (p.8). As students practice visual literacy skills, they make links between visual and verbal languages. Specifically, students will “begin to make linkages between verbal language composed of predicate and noun elements arranged purposely to communicate, and visual language elements (action and object elements) which are also arranged for intentional communication” (Fransecky & Debes, 1972, p.7). Moreover, many children can be made aware of their thinking, looking and planning processes when viewing artwork, as shown by Arzipe and Styles’ (2003) conclusions that “children were also able to go inside their own heads to describe what they were thinking and feeling as they read a picture” (p. 202). The more

metacognitively aware children are when practicing visual literacy the more likely they will reuse strategies in new situations that were previously successful.

Studying transfer of skills is a very challenging task. There are many difficulties associated with correlational studies in that one cannot definitively determine which variable causes the other when establishing an association between the variables a and b in one period. However, Abigail Housen conducted a complex study specifically designed to examine the occurrence of transfer while using VTS methods.

VTS and The Transfer Theory: A Study by Abigail Housen

In the early years of Housen's VTS program, anecdotal reports from teachers suggested an unexpected result: students were using VTS thinking strategies in other subjects (Housen, 2002). In the 1990's Housen conducted a complex, five-year longitudinal study to examine how visual thinking strategies used in the arts affect aesthetic growth, critical thinking and its transfer. The study took place as a partnership between the Byron School District, the Minneapolis Institute of the Arts and Housen's foundation, Visual Understanding in Education (VUE).

While Housen doesn't use the term "visual literacy", her questioning techniques are a method that directly develops students' visual literacy abilities. Instead, Housen uses the term "visual thinking strategies", or VTS, in her study. These strategies are questioning techniques designed to "observe, evaluate, synthesize, justify and speculate" used in combination with visual art. This is one of the most involved and thought-out studies that shows how visual literacy can directly affect critical thinking skills and reading levels.

While Housen agrees with Eisner that conducting a study regarding transfer is very difficult, she developed an involved and complex study comprised of ten data collections every Fall and Spring and ongoing observations including specially designed non-obtrusive interview questions regarding art and non-art objects, multiple choice instruments, logs, questionnaires, writing samples, and observation forms. Housen (2002) explains that she used "multiple measures over multiple observation periods to

observe a pattern of statistically significant shifts over time; changes that make it possible to identify a causal relationship” (p. 102).

In this statistically sound and significant study, students spent time observing and discussing artworks. Discussions were led through open-ended questions based on Housen’s Visual Thinking Strategies. According to Housen (2002), these questioning techniques, directed towards carefully chosen art images, create “a kind of ‘critical thinking studio’ in which learners observe carefully, evaluate, synthesize, justify and speculate – habits of mind which have a long history in education and which we find central to aesthetic growth and critical thinking” (p. 101).

After looking at students’ current views and approaches to visual art, Housen specifically examined content and context transfer through two main methods. The first was via supported observations, which were student ideas that were grounded in evidence. For example, “*I think they welded the handle onto it because it kind of looks like the metal kind of melted and then hardened*” is a supported observation because it is based on the student actually observing the visual properties of the metal. The second was through speculations, which included possible meanings or outcomes based on evidence, such as “*And there’s a little slot for it to lay on in the side. Probably to crush stuff, too.*” Housen recorded the number of supported observations and speculations while listening to students and created critical thinking scores for each student.

Housen’s study had several main outcomes. First, the study showed transfer occurrence across social contexts. While both the control and experimental groups showed development, the experimental group showed a significantly more context transfer than the control group. Second, Housen compared mean critical thinking scores of each group to examine transfer across content and found that the scores of the experimental group were more than twice of those of the control group. Third, sequence effects were examined to determine whether or not both types of transfer would occur simultaneously. Housen discovered that context transfer began to be statistically significant within one and a half years into the study and were then consistent until the end of the study. However, content transfer did not occur until closer to the end of the five-year study. Moreover, students who began the study at a later aesthetic development stage, or in other words, were more art experienced, had a six times

greater content transfer score than those who began the study at an earlier aesthetic development stage. This showed Housen's fourth main outcome illustrating the effects of developmental level on transfer.

What is especially interesting about this study is that in 1996 Minnesota began requiring students in grade 8 to take a state-wide achievement test which included a reading test. In the first year, only 54% of Byron students passed the reading test. In the following year, 77% students who were participating in the study passed the reading test, whereas only 68% in the state passed and 71% in the control group passed. This was 2.5 times the state's average gain in the reading test. The trend continued and by 2000 88% of Byron students passed the reading test. Everyone involved, including the teachers and principal, believed that the participation in the arts program was a major contributing factor in the reading score increase.

Moreover, Project Zero at Harvard University replicated these findings in an independent study with the Museum of Modern Art. This study was completely different, using a different design, measurements and population sample, and came to the same conclusions that using visual thinking strategies contributes to reasoning and overall literacy skills. They discovered that "being taught to "read" art through a "visual thinking curriculum" helped 9- and 10-year-old students develop their reasoning based on visual evidence, translating into better "reading" of evidence in science" (Tishman, S., MacCillivary, D., & Palmer, P. 2002). This supports the possibility that visual literacy learning can transfer to other subject areas.

Visual Art Instruction, Reading and Transfer: A Study by Burger and Winner

Many people need solid, quantitative research before they can fully believe and embrace theories such as that of the transfer of Fine Art skills to other subject areas. Kristin Burger and Ellen Winner are two researchers who have conducted a thorough, statistical review of research that has been carried out in the field of arts education. They also found that many art programs that claimed to improve students' reading abilities were not scientifically sound. For example, some programs designed to help remedial students improve reading skills did help the students, but their success could not really be attributed to the arts because students received instruction in both visual

arts and reading. In addition, control groups were not used, and therefore researchers could not determine if the improvement in reading was due to the fact that the reading instruction was integrated with the arts, or simply due to the extra reading instruction (Burger & Winner, 2000, p. 278).

Throughout their thorough research, Burger and Winner studied the idea of transfer and one of their studies focused specifically on how visual art instruction can help students learn to read, if at all. They hypothesized that visual arts instruction could improve students' reading ability by either improving cognitive mechanisms through an actual transfer of skills, or by increasing students' motivation by providing an engaging entry point to reading.

While conducting their research, Burger and Winner searched 4133 records from seven electronic databases from their inception to 1998, 41 journals, and requested unpublished data from 200 arts education researchers. They eliminated all studies except sound, empirical research with control groups. They were left with only ten valid studies.

Burger and Winner continued their research by coding the characteristics of each study and statistically analyzing their findings. Based on valid studies and statistically correct methodology, they disproved their first hypothesis by finding that there is not a reliable relationship between arts instruction and reading improvement. However, they also noted that their findings were "extremely fragile" since their sample size was so small. Burger and Winner concluded by saying that more replications are needed before drawing and firm conclusions.

Burger and Winner also examined the transfer of visual art skills to reading readiness skills. Readiness was chosen because reading readiness tests are often figural in nature rather than linguistic. Further analysis on their data revealed that there is a moderate degree of transfer skills from art to reading readiness (visual skill to visual skill), but no transfer from art to reading achievement (from visual skill to linguistic skill).

Their analysis also revealed that arts instruction "may be effective" as an entry point into reading, weakly supporting their second hypothesis. Overall, these researchers discovered that visual arts instruction could lead to small improvements in

visual reading readiness, but not in reading achievement. In addition, they found that teaching reading skills in an engaging way, such as through the arts, might help children become motivated to read more. Although more research is needed in this area in order to determine strong results, this study shows that visual literacy development can help in creating a basis for reading.

Marketing Research

Although there is little research concerning transfer in the field of visual art, a lot of research has been conducted on transfer in the field of marketing and advertising. The US Advertising Research Foundation has determined that, no matter what format the ad, the best predictor variable for advertising effectiveness is *likeability*. This means that if you love the ad, you are more likely to buy the product.

What does this have to do with visual literacy and transfer? Studies in marketing (DeCock, B. & DePelsmacker, P. (2000), Du Plessis, E. C. (2001), Gordon, W. (2006)) have shown that the likeability of the advertisement is transferred to the likeability of the brand, which is important in advertising because this results in the higher likelihood that consumers will purchase the product. So can we also say that likeability of the picture book can be transferred to the likeability of reading? I believe that there is a strong possibility that we can. Throughout my teaching career I have often come across elementary students who have claimed they “don’t like reading” and when asked why, they say that they don’t like the books. I have also met many students in university who have said that they didn’t like reading when they were young until they discovered a certain book or author. It seems that these students transferred their dislike of a few books to reading in general. Perhaps if the roles were reversed and these students enjoyed their books, these feelings would have transferred to liking the process of reading as well.

Another interesting fact is that studies have shown that the advertising itself can be considered as a brand attribute (Aaker, D. A. & Myers, J. G. (1987), Gardner, Meryl Paula. (1983)). This means that if an advertisement is liked, consumers will tend to transfer this attribute of the advertisement to the product as well. In other words, “like the ad, like the product”. So can we say that experiences with the images in books can

impact reading? I believe this is also true. Looking at my previous example, my adult students said they didn't like reading until they discovered a particular author or book. The students' initial experiences with books were considered as an attribute to the likeability of reading in general until they "discovered" a love of reading after finding a particular author or book they liked. In other words, they moved from the attitude "don't like the book, don't like reading" to the attitude "like the book, like reading".

Interarts Analogies

While I did not discover many studies on the effects of one mode of communication on another mode, I did uncover some theorists who have examined interart comparisons. Interarts in this sense refers to all forms of literature, especially poetry, and all forms of visual art such as painting and sculpture. While the interarts scope is very broad, this field attempts to highlight comparisons between the various forms of art and important concepts begin to emerge that are applicable to the relationships between picture book illustrations and literacy.

Many interart theorists, such as J.P. Barricelli, J. Gibaldi, Wellek, Merriman and Ulrich Weisstein tend to focus on methodological comparisons among the arts. Troy Thomas is one theorist that has examined the arts from an interart perspective, providing insights into the comparison that go beyond methodology. Thomas (1991, pg 17) makes an interesting point when he states "when different media of the arts are taken into account, as here with poetry and architecture, equivalent or parallel structural features are almost impossible to find, because terms of comparison like "balance" have to be interpreted differently when they are applied to each art". Because of this, Thomas explains that only analogies can be made when comparing the arts. While it is not my goal to draw comparisons between specific artists, the following studies provide insight into the nature of language and visual arts and highlight their relationships.

Thomas explores an example from the Renaissance by comparing the works of Shakespeare and Titian, an interesting period when painting and poetry were considered to be interchangeable due to their common narrative content (Thomas, 1991). In this example, both Shakespeare and Titian attempt to portray the same subject, namely Venus and Adonis. It must be noted that Titian is not illustrating Shakespeare's poem,

they are merely addressing the same subject using different media. While Titian's painting can be found below in Figure 15, I did not include Shakespeare's poem because it is over 1100 lines long.



Fig. 16

In his analysis, Thomas highlights the structural differences between poetry and painting. The most prominent difference is that the painter must tell a story in a single image. “The painter must show a kind of symbolic and synthetic image that is representative of the story, that is, he must to some extent synthesize what has already happened and what will happen with what is happening now” (pg 21, Thomas). In other words, due to the nature of painting, Titian was forced to compress all of the narrative elements into one image, whereas Shakespeare did not have these constraints. Although the Renaissance theory of *ut picture poesis* (as is painting, so is poetry) considered the two arts interchangeable on the basis of narratives, the theory ignores the fact that painting is a spatial whereas poetry is temporal. This is an important point when developing visual literacy. However, while a single illustration will also have these constraints, the fact that a picture book allows for multiple illustrations and that the reader is encouraged to examine all of the images in sequence, allows the picture book as a whole to bypass the spatial element that other artists must obey.



Fig. 17

A second example comes from the Romantic artists, who considered the arts to be interchangeable based on their use of symbols. James Heffernan compares Coleridge and Turner in *The Re-Creation of Landscape, A Study of Wordsworth, Coleridge, Constable and Turner*. He forms analogies through the artists' use of geometry and patterns. For example, in Figure 17, the painting *Slavers Throwing Overboard the Dead and Dying – Typhoon Coming On*, one can see that Turner uses an x-y axis that bisects the painting horizontally and vertically, with the sun and its reflection forming the y-axis and the ship and the waves forming the x-axis. Turner paints the sun and its reflection with bright yellows and reds, creating similarities to a burning cross on the axis. Heffernan explains that “the meeting point of sea and sky becomes at once a fiery intersection and a borderless continuum of burning brilliance” (Heffernan, pg 181). The axes lead the eyes through the painting, from the drowning slaves in the foreground to the sun in the background, creating linear boundaries which are navigated via a cross as a symbol of transcendence. In this case the cross shape is a structural element that can be read as a symbol.

Coleridge uses words in his poem “*Rime of the Ancient Mariner*” to create similar effects of establishing a horizon and then transcending it. A horizon, a similarly burning sea, is described when Coleridge states “The western wave was all a-flame”. In part III of the poem he introduces the “spectre-bark”, an ambiguous shape that moves and veers on the water. When Coleridge explains how the “strange shape drove suddenly betwixt us and the sun”, like Turner, he both acknowledges and transcends the horizon.

The ship passing in front of the sun can also be read as a symbol, but instead of being an image like in Turner's painting, it is part of the narrative structure of the poem.



Fig. 18

Susie Asado

By Gertrude Stein 1874–1946

Sweet sweet sweet sweet sweet tea.

Susie Asado.

Sweet sweet sweet sweet sweet tea.

Susie Asado.

Susie Asado which is a told tray sure.

A lean on the shoe this means slips slips hers.

When the ancient light grey is clean it is yellow, it is a silver seller.

This is a please this is a please there are the saids to jelly.

These are the wets these say the sets to leave a crown to Incy.

Incy is short for incubus.

A pot. A pot is a beginning of a rare bit of trees. Trees tremble, the old vats are in bobbles, bobbles which shade and shove and render clean, render clean must.

Drink pups.
Drink pups drink pups lease a sash hold, see it shine and a
bobolink has pins. It shows a nail.
What is a nail. A nail is unison.
Sweet sweet sweet sweet sweet tea.

A third example can be seen with Marjorie Perloff's examination of Picasso and Stein, two artists from the 20th century, when visual and verbal artists tended use ambiguous and mixed signs, often integrating narration, symbol and sign. For example, painters began to use words as subjects and symbols, such as the Futurists using concepts such as time, speed, technology and youth, and poets began to arrange their words in predetermined patterns such as the Imagists focus on precise language and willingness to experiment with non-traditional verse forms. Perloff talks about the ambiguity of Picasso's *Ma Jolie* (Figure 18) that shows signs of objects and a person simultaneously merging into the background. Gertrude Stein's "*Susie Asado*" is also based on ambiguity and is abstract because the meanings of the words are deliberately ambiguous and open to interpretation (Thomas, 1991). As Perloff (1981, p 73) explains "Susie is never distinguished from the space in which she moves; we see neither her nor the Spanish dance she performs. Rather, a number of 'verbal planes' are superimposed so as to create the kind of geometrical fantasy found in Picasso's painting". In this case, verbal planes include rhythms, repetition and rhyme and meanings and relationships of words. This method of verbally expressing an abstraction is similar to Cubism's manner of synthesizing multiple perspectives into a single image (Davidson, 1997). The multiple meanings and relationships of the words parallels the instability of Cubism (Perloff, p 77). As Thomas (1991) explains, both Picasso and Stein use their media to provide glimpses of recognizable objects but obscures them among abstract facets.

These examples highlight how visual arts and text can express similar ideas, paint similar scenes (either on canvas or imaginatively) and spark similar emotions through various uses of alike elements such as structures, shapes, colors, and effects. Although these are three very specific examples and my thesis revolves around a much broader concept, visual literacy development and general reading progression, these examples show how analogies can be made between the two forms of communication. When teaching in the classroom, teachers can lead students to make similar types of

analogies in a much broader sense. Instead of analyzing complex poetry and visual art, young students can be led to find analogies between approaches to examining artwork and approaches to reading text. With practice, students can become comfortable with various methodologies that are applicable to both visual literacy and reading.

Conclusions

Practicing visual literacy provides ample opportunities to practice language and communication skills, decoding and encoding information, and synthesizing information to aid overall comprehension. Students practice visual interpretation in a primary, concrete manner, gaining confidence to interpret symbolic forms. For example, recognizing tears in the eyes of a figure is more concrete than reading the words describing a character's feelings. The student is provided with a quick literal understanding upon which a fuller abstract understanding can build upon. Moreover, examining images in picture books provides students with the opportunity to develop and practice strategies employed by proficient readers and become familiar with the basic structure of stories. Participating in these experiences in an informal and aesthetically pleasing way can motivate students to continue participating in these activities and transfer these skills from visual literacy to print literacy.

Chapter 4: Approaches to Developing Visual Literacy

The previous chapter outlined how the strategies used in print literacy can be practiced through visual literacy. However, students need to be taught visual literacy and need ample time and opportunities to practice. Throughout my research I have discovered that there are not many visual literacy methodologies that are currently advocated. Moreover, some teaching methodologies use and teach visual literacy but do not use this or even a similar term, making these programs difficult to locate. This chapter focuses on the few contemporary teaching approaches that revolve around the student as a viewer of art and have been designed through current research. Although these methods strive to develop visual literacy, they do not do so with the specific intent of developing a literacy foundation. Therefore this chapter serves not only as a review of the approaches but also as an analysis of their strengths, weaknesses and potential to strengthen a reading foundation.

Abigail Housen and Philip Yenawine: Visual Thinking Strategies (VTS)

When I taught grades K through 2, I often used open-ended questioning techniques in many subject areas. I found that it helped students to think for themselves, develop their own hypotheses and come to their own conclusions. Enabling students to think for themselves empowered their learning. By using open-ended questioning in Visual Arts classes, my students came to the understanding that visual art could mean different things to different people. They knew that they could scrutinize an artwork and develop their own conclusions while being fully supported by their fellow classmates. It was a very useful teaching technique with the Visual Arts because it encouraged my students to reduce making judgements and helped them embrace the Visual Arts and its applications.

While conducting my research in the visual arts field, I came across a teaching approach that was very similar to my methods. It was the Visual Thinking Strategy, developed by cognitive psychologist Abigail Housen and museum educator Philip Yenawine. As suggested by its title, VTS is a method of teaching visual literacy that was originally designed to develop aesthetic understanding, or as defined by Housen and Yenawine, the range of thoughts and feelings that occur when looking at art (Housen, 2002).

Visual Thinking Strategy (VTS) utilizes specific open-ended questioning techniques that encourage all students to participate in discussions and use a combination of visual skills and their own prior knowledge to come to their own conclusions about a piece of artwork. Since much of Housen's research has been conducted with partnerships between schools and museums, most of the artwork used in her studies has been original artworks, mostly in the form of paintings.

Specific artworks are chosen in advance and put into careful order. The three founding questions are: What's going on in this picture? What do you see that makes you say that? What else can you find? By going through this process, students are led to carefully examine a painting and talk about it, back up their ideas with evidence, re-examine the image for deeper meaning, and finally, to keep searching and consider the ideas of others while discussing various interpretations. Teachers must listen carefully to student responses, physically point to what the student mentions in the image, accept all student comments, paraphrase comments to demonstrate proper sentence construction and vocabulary, and finally, link answers together to show how ideas are linked and build upon each other. This process takes time and teachers must be able to be patient with students and provide them with the opportunities to examine the artwork, think about it, and participate in full discussions.

While participating in VTS, students have an opportunity to practice their verbal skills, increase their vocabulary base, develop supported interpretations of the artwork, develop critical thinking skills, and build confidence. All of these are important in developing and improving a literacy foundation. VTS questioning techniques encourage decoding and encoding abilities by developing viewing skills to consciously see lines, textures, and values, and analyze them as various forms and images. Students begin to

comprehend the visual images while they discover that symbols contain meaning. Students also use problem solving skills and critical thinking when making sense of the images.

The visual literacy skills practiced when participating in VTS are important because they are also used while engaged in print literacy. Students need to be able to draw conclusions and make inferences supported from the text. They also need to use critical thinking skills to think about what they are reading and apply what they know to different situations. Students should also be able to understand and approach new vocabulary confidently. While writing, students need to support their arguments with examples and evidence, use and take risks with new vocabulary, critically think about what they have written, and be confident in their work. A good oral language base that is practiced in VTS can help students with both reading and writing. However, since VTS was created with the goal of developing aesthetic understanding and not literacy, this strategy does not touch upon all of the key elements that are needed in a strong literacy foundation. The main aspect that is missing is providing students with the opportunity to experience literacy in action. There are no forms of reading and/or writing involved in the process at all.

Although it seems as though this strategy would be easy to use, it may not be as easy as one would think. Questioning techniques can be honed through practice, but a certain atmosphere of trust needs to be cultivated in the classroom before this strategy can be fully and most effectively employed. In order for students to fully participate in the discussions, all students, whether they are young children or experienced adults, need to feel secure. They need to feel that their views and ideas are worthy, valuable and legitimate. Nobody has a right or wrong opinion. At times I have found it easier to cultivate this atmosphere among young children than among adults, especially in visual art classes. Perhaps this is because I have found that some adults tend to place art as an elitist activity with those who claim to fully understand it deemed superior to those who just “don’t get it”.

VTS organizers agree that the implementation of this strategy can be complicated and that on the surface asking questions and conducting a discussion seems simple, but in reality it is not. VTS organizers offer extensive training programs

for educators and people interested in learning how to apply VTS questioning strategies and principles, with some programs spanning several years.

Another challenge with this strategy is the focus on finding the artwork to study. As mentioned, the studies that have been conducted have taken place in schools with partnerships with museums and galleries. Once a gallery has been chosen, the artwork must be chosen as well. In order to help educators choose visual artwork to use in a VTS program, Housen and her staff have written a document on how to choose artworks and sequence them in order to make sure they are appropriate for students with respect to their ages and abilities. This takes time that many educators simply do not have. There is also a lot of effort involved in having a classroom full of children visit the art gallery or museum on a regular basis. In addition, while it may be easy to hire a professional to come into the classroom and administer the program, it is also costly, which is a huge factor in today's educational systems.

The Eric Carle Museum: Visual Thinking Strategies (VTS) and the Whole Book Approach (WBA)

The Eric Carle Museum in Massachusetts is a unique museum in that it focuses on both visual arts and picture books. This is especially relevant in the development of a literacy foundation because I would argue that using picture books (as outlined in the following chapter) is one of the best ways to use visual literacy to strengthen a text literacy foundation. Although the museum does not strive to develop such a foundation, it is one of the only programs available that combines both visual literacy and picture books. With a mandate to foster connections between visual and verbal literacy, the Eric Carle Museum uses a combination of Visual Thinking Strategies and Whole Book Approaches.

Instead of applying VTS as outlined by Housen, the museum facilitators use a modified VTS approach when leading discussions concerning the art on display at the museum. Although the artworks displayed are from picture books, they are displayed in the galleries like other works of visual art and paintings found in other museums. Often, the questions that revolve around the VTS questions are altered depending on the

audience and they emphasize active engagement with the viewers. For example, one image on display from Eric Carle's book, *Pancakes, Pancakes* (1990), depicts a barefoot boy sitting at a table. His mother, wearing an apron, is standing on the other side of the table holding a large spoon. An apple, a cup and a pitcher are on the table and a cat with a raised paw can be seen sitting under the table. When discussing the image with younger audiences facilitators tend to focus more on the boy and the cat. Some questions that were asked include: Was the cat about to scratch the boy? Why might the cat do that? Had the boy kicked the cat? Whereas when discussing the image with older audiences, such as a group of librarians, the facilitators asked questions that focused on what had transpired between the boy and his mother such as: Was she upset with him? Was she scolding him? Was she asking him what he wanted for breakfast? Although the museum facilitators do not use the specific VTS questions, they continue to support the fundamentals of VTS by encouraging active engagement, questioning, reasoning and critical thinking with the artwork in question. Since this approach is very similar to VTS, it also provides similar benefits to developing a literacy foundation and again like VTS, it does not provide any experience in relation to literacy in action.

The Eric Carle Museum also includes a library where visitors can browse through books and participate in regularly scheduled story times. Story times, specifically designed through the Whole Book Approach (WBA), are created to provide full reading experiences. Facilitators strive to engage listeners in discussions about the text, art, and book design. Careful observation, listening, critical and creative thinking are encouraged. Questions are asked and discussions are encouraged while the book is being read. This results in an interactive experience of reading with children rather than reading to children. Studies in dialogic reading techniques such as the WBA, have shown that interactive reading can aid comprehension by providing time for reflection, clarification and expansion (Caserotti, 2008).

This approach does focus on picture books as works of art and provides children with some of the elements needed in a literacy foundation. These include direct experience with literacy as well as an opportunity for expansion of communication and oral skills. However, it does not specifically address visual literacy. The WBA does not contain specific questioning in order to focus students on nuances or symbols and

decoding of such images. Comprehension is addressed in a general manner as the book is read. Problem solving and critical thinking may or may not occur, depending on the discussion that takes place and what questions are asked. Since every book, reading experience and group discussion is different, the depth of problem solving and critical thinking will vary greatly.

Analyzing Illustrations in Picture Books

Learning how to look at illustrations, see, understand and interpret details such as those in the examples above requires practice and guidance. While the WBA does not specifically and systematically address all of the concepts outlined in this section, it does highlight some of the ideas that may be touched upon during the open discussions that result from this method.

Although every picture book is unique in that a different story is told and different illustrations are used, there are a number of elements that all picture books have in common that are important as they form the basis for practicing visual literacy. Picture books have a special relationship between the artwork and the storyline that is created through specific visual elements such as layout, media choice, endpapers, symbolism, and typography. Details are used to convey information about characters in the story; appearances, actions, movements, feelings, thoughts, dispositions and personalities are portrayed regarding characters, providing important information about the story to the viewer. Illustrations also use the elements and principles of art to convey information, including use of space, color, line, form, texture, value, and space, and balance, harmony, unity, emphasis, contrast, composition. This makes using picture books as sources for visual literacy development highly enriched and different from any other form of visual art.

Many illustrations in picture books maintain a careful use of space. Illustrators carefully position the readers in order to influence their understandings, and responses to the text and use artistic elements such as angles, sizes, framing, color, and demands and offers. The use of angles in images allows different relationships to be conveyed between people and between people and objects. For example, if a reader is positioned to look up at an object in an illustration, a feeling of superiority is created. Objects or

characters may vary in size in order to emphasize certain characteristics. The frame of the illustration (long shot, a medium shot, or a close-up shot) determines how much information is given to the reader and this can create a social relationship with the reader as well. The placement of characters and use of perspective often is used to help tell the story. For example, in *The Tale of Peter Rabbit* (Potter, 1902), the reader finds Peter facing away and separated from his family, foreshadowing his disobedience in the story. The use of space can also be found within the page breaks in a picture book. Pauses and gaps automatically exist as viewers turn each page, moving from one illustration to the next. These gaps are often carefully planned, encouraging readers to pause and fill in missing information. For example, there is a page break between Max getting in trouble and being sent to his room without dinner in Sendak's (1988) *Where the Wild Things Are*. What did Max's mother say to him? What happened at that moment? Did Max talk back to his mother? Viewers fill in the gap with imagined dialogue and actions during these brief gaps in the page breaks.

Like any form of visual art, the images in picture books also use color to provide information and create mood. Changes in color, tone and saturation can create various moods and feelings. For example, Coody's (1992) *Little Red Riding Hood* depicts very dark colors. His use of reds can be interpreted as warnings and create a sense of danger throughout the story. Various lines and shapes and sizes of images can be used to draw the viewer's attention to certain details, highlighting important features. For example, *The Red Tree* (Tan, 2010) often uses both color and size to draw the viewer's attention to mood and important aspects in the book. Another example can be seen with the colors of the endpapers in *The Napping House* (Wood, 2009). The dark blue endpapers at the beginning of the book signify nighttime whereas the azure blue endpapers at the end of the book signify morning and waking up, corresponding to the book's storyline.

Perrault's *Cinderella*, translated by Marcia Brown (1971), uses color and line to communicate Cinderella's demeanor to the reader. The lack of line and use of soft, natural colors that fade into the background illustrates Cinderella's gentle character. The media choice of chalk pastels perfectly suit Cinderella's character. The use of line and color change when the stepsisters enter. Brown's stronger use of line and harsh colors contrast the characters of the stepsisters with Cinderella. Brown's use of shape further

emphasize the difference in personalities, as the images of Cinderella include soft, rounded shapes whereas the illustrations of the stepsisters include harsher, jagged shapes.

Shapes are also used extensively in *The Napping House*, by Audrey Wood (2009). As the title suggests, the story is about a number of characters in a house that have a nap. The book begins with an illustration of the house. This illustration contains many repeating rectangular shapes – the yard, the fence slats, the front door, the five windows, and even the house itself are rectangular. This provides the viewer with a sense of stability, strength and safety. This feeling is important in this book as it is difficult to fall asleep without a sense of security. Furthermore, Wood’s use of the color blue throughout the book provides a feeling of calmness and tranquility, which emphasizes the theme of napping even more.

Typography is another feature that can provide information to the reader/viewer. *Baboushka and the three Kings* by Ruth Robbins (1986) is a Russian Christmas tale. The typography used in this book almost seems to be a cross between Times New Roman and Cyrillic, providing a parallel to Cyrillic lettering and drawing attention to the fact that the story is a Russian tale. The slightly large font size, dark black color and fancy decorative elements also help the type blend with the heavy black ink and color wash illustrations, creating a distinctive and unified whole.

Illustrations in picture books often use symbolism to help tell the story. As readers learn to pay attention to these nuances and symbols in the images, they also learn about the themes, characters, settings and story that occur in the books. Appearance, wear, height, visual features, actions, and movements can all provide information about characters and even help readers bond with certain characters. For example, in *Cinderella* by David Delamare (1993), Cinderella looks directly at viewer, has simple hair and wears a simple gown in order to show her purity and her step stepsister’s vulgarity and to create a bond between readers and the character. Another example can be seen with the character of the big bad wolf in *The True Story of the Three Little Pigs* by Jon Scieska (1996). Examining the wolf’s clothes (a t-shirt stating “thugs need hugs, too”) and the ingredients he uses when baking his cake tells the reader about his true character. Similarly, sometimes symbols of social status can be

interpreted and can aid readers in understanding characters, such as those used in the illustrations by John Goodall in his series on Edwardian England. Another more direct example of symbolism can be found with *Truck* by Donald Crews (1991), which displays many traffic symbols throughout the book for readers to interpret. According to Bader (1976), examining symbols and nuances such as these in relation to literary elements helps to teach the reader about narrative conventions and develops their literary competence. Children react to these notions, interact with the images, and interpret complex illustrations.

To sum up, picture books are an excellent way to create a foundation for literacy development. They are accessible, appeal to adults and children, and are not intimidating. Since they are already in a book format picture books tend to already have an automatic approval and acceptance in schools. Picture books are relatively inexpensive, as they do not require educators to spend a great deal of money on equipment and supplies. With so many picture books available, they can easily be used to expose children to many types of artistic styles. Overall, in my view they are an appropriate and ideal medium to use to expand visual literacy, bridging children to literacy development.

Richards and Anderson: See, Think, Wonder (STW)

Janet Richards (2003) and Nancy Anderson (2003) are two researchers who found that when beginning to read, emergent readers tend not to focus on the subtle changes in illustrations that can provide important information in a story such as changes in facial expressions that convey characters' thoughts. They also found that some readers become preoccupied with details at the expense of the whole story. The See, Think, Wonder strategy was developed as a response to these observations to help develop emerging readers' visual literacy skills.

This approach is similar to VTS in that it revolves around three similar questions: "What do I See? What do I Think? What do I Wonder?" However, it differs in that the strategy was developed with storybook illustrations in mind rather than general visual artwork like VTS. In addition, rather than following a question-response format, the

questions in this strategy are used as a model for thinking and expressing oneself and work the best when all three questions are addressed in succession. For example, using the illustration on the front cover of *Where the Wild Things Are* (Sendak, 1963) the facilitator could say: "I see a giant hairy beast" (Seeing); "I think this must be a fantasy story because in real life there is no such thing as giant beasts like this" (Thinking); "I wonder if the beast will try to get on that boat?" (Wondering). Richards and Anderson suggest when presenting this approach, the STW process should be modelled with the introduction of every new book until students can generate their own expressions that follow the STW model. Then the process can be followed for any number of viewing activities.

According to the Project Zero team at Harvard University (2011), the STW approach provides a good routine for motivating students at the beginning of new units or new stories. The strategy can also be used to introduce a new object that relates to a current topic or theme by encouraging students to make connections and apply their knowledge. Other applications include having students work in pairs to share their ideas, or providing opportunities for students to engage in multiple literacy experiences by drawing and painting illustrations they think should have been included in a storybook.

According to Richards and Anderson (2003), the STW approach prompts emergent readers to carefully examine the nuances of illustrations that supply important information in stories. It can aid in making predictions about characters, including goals, actions and personality traits, examining settings and noticing important events that occur. In addition, like VTS, it can motivate students, encourage communication, oral language practice, listening and considering other's views and ideas. This approach also touches upon many of the elements needed in a solid literacy foundation, including providing students with literacy experience. However, I believe that the strategy does not provide as in-depth an experience with visual literacy as VTS. Students are encouraged to create their own understandings, but are not specifically directed to certain elements. Critical thinking and problem solving may be practiced by some students, but is not specifically addressed, as the discussions tend to be student-led. In addition, specific decoding of the visual images is not addressed as the approach focuses more on students' observations and subsequent comments and questions.

Although the STW approach does not focus on developing a literacy foundation, it has proven to be quite popular and can be seen in use in many different organizations. One example is the Champaign Public Library (CPL) in Illinois. They have developed a visual literacy program based on the STW approach which strives to help emergent readers recognize connections between text and art, to see illustrations as a whole, and understand the basics of how art works, and to help older students connect reading with pictures and lead them toward visualization as they read more complex texts (Champaign Public Library, 2011).

The library offers programs to students in grades 1, 4 and 5. The programs are slightly different from pure STW programs in that they begin with a mini lesson about a visual art design aspect first, such as use of shape or color. The design aspect is closely linked to one used in a pre-chosen, corresponding storybook. Then the facilitator hides the text in the storybook and goes through the pages with the students. STW techniques are encouraged on each page and ample time is provided for students to share their thoughts, backing up ideas with details found in the illustrations. Facilitators read the text afterwards, discussing how close the students' interpretations are to the actual text.

Although the program does not aim to develop a literacy foundation, it does so indirectly through the encouragement of visual literacy with the storybooks while the students focus on a particular design element. While all of the elements necessary in developing a literacy foundation are touched upon in this program, I believe that a deeper analysis of the illustrations can be achieved through VTS, resulting in a deeper problem solving and critical thinking. A deeper analysis could also be achieved by focusing on a sample of the illustrations in a picture book with VTS rather than looking at all of the illustrations in a book with the STW approach. However, this brings us back to the challenges of developing suitable questions and choosing picture books that would best suit teacher and student needs.

The Guggenheim Museum: Learning Through Art (LTA)

As previously discussed, the Guggenheim Museum in New York City, developed a study to research how the arts influence literacy skills. After determining a positive correlation, as detailed in chapter 3 of this paper, the museum continued to develop and implement their LTA program in order to support learning across the curriculum.

The LTA program differs from the other programs outlined in this chapter because it is primarily an artist-in-the-school program. Rather than students traveling to museums or libraries and learning visual literacy from facilitators, the facilitators and artists travel to the schools. In addition, instead of having the facilitators travel to the school, another option is available. Teachers can use the website to develop their own questioning strategies and apply them in their classrooms; the teachers can easily become the facilitator. The LTA program is also comprised of two parts – one with the students as viewers of art (Inquiry with Art stream) and the other with students as creators of art (Art Explorations stream).

The Inquiry with Art program is a program that helps educators teach their current subjects supplemented with visual artwork. For example, if a class is learning about communities and how they function, then artwork that also shows various forms of community should also be shown to the students and discussed through a series of questions. It is an interesting program as it enables teachers to develop their own questioning strategies in order to facilitate discussions revolving around works of art. Since the program focuses on art across the curriculum, there is not a specific focus on visual literacy. However, visual literacy is developed and extended through the questioning strategies that teachers use when examining artworks. I have included this particular program in my discussion because of its flexible nature and the way it can help facilitators learn how to question artworks and assemble questions in a meaningful way. Although the site is intended for use with grades 2-6, it can be easily used for younger students as well.

There are six steps in creating an inquiry plan. First, educators must choose a theme on which to base the inquiry which should link with a curricular topic. Once a theme is chosen and put into the website, a list of paintings is provided along with brief

interpretive essays. The next step is to read the essays and select an artwork that best suits the educator's needs. The third step is brainstorming questions, beginning with observational types of questions, then moving to open-ended interpretive types of questions. The fourth step is developing informational and/or follow-up questions by rereading the interpretive essay and selecting information that is relevant to the theme and would help deepen students' understanding. The fifth step is rereading the questions and eliminating closed-ended, age-inappropriate or irrelevant questions by asking: Is this question open-ended? Are there many possible acceptable answers to the question? Does this question give students the opportunity to build on prior knowledge? Will students have to look carefully at the artwork to answer this question? Will they be able to answer it by looking at the artwork? Is this question the best one to get students to think about the theme? Finally, the remaining questions are sequenced. This can be done by moving from general interpretive questions into more theme-specific questions, determining a natural transition between questions as they flow through each other, or by following Bloom's taxonomy which encourages a progression from simple to more complex as one moves through the following categories: knowledge, comprehension, application, analysis, synthesis and evaluation. The taxonomy is outlined in Appendix D.

One example on the Guggenheim website shows questioning based on a community theme. Going through the process results in the following questions based on Pissarro's painting *The Hermitage* that depicts a village scene. The example begins with a general observational question: What do you notice? Then interpretive questions are introduced: How is this place different from your own community? How is it similar? What can we tell about this place? Finally, informational and follow-up questions are asked: This place is outside of Pontoise, a town near Paris, France. The artist, Camille Pissarro, lived here for many years. Why do you think he chose to live here for so long? Would you want to live here? Why or why not?

It is interesting that the Guggenheim program also divides its questioning strategies into sections: observational questions, interpretive questions, and informational/follow-up questions. This is similar to VTS (What's going on in this picture? What do you see that makes you say that? What else can you find?). However, since the teacher develops his or her specific questions, it is guaranteed that the questions will

be tailored to those particular students and the specific curriculum being taught at that time. This is particularly true with the last category of questioning because the teacher can guide students to coming up with their own answers to questions that are particularly important to that particular group of students.

While this program is very flexible, it takes time to prepare. Teachers must take the initiative to go through numerous paintings and other visual artwork in order to choose appropriate images for his or her students. This could take a lot of time, especially if the teacher is not already familiar with visual artwork. This task could even intimidate some teachers, enough so that they would not want to even attempt this strategy. In addition, brainstorming questions, eliminating unwanted ones and sequencing the remaining questions is also time consuming.

The Fitzwilliam Museum: FitzKits (DIY)

Some programs available to educators are in fact, oriented towards developing visual literacy but are not labelled or advertised as such. Obviously, this makes these programs difficult to locate. In addition, these programs have not been rigorously studied and the effects of visual literacy learning have not been examined within these programs. However, this does not mean that these programs are worthless. One example is the Fitzwilliam Museum in Cambridge, England.

The Fitzwilliam has developed specialized kits that anyone can borrow and use to create a deep and interactive experience in the museum. According to administrators, these kits are unique to the Fitzwilliam and have become very popular. Each kit centers on a different theme and provides materials to hold, examine and use, along with questions to answer, activities to play, and a parent/educator guide. Each kit revolves around artworks in several different rooms in the museum.

Since these kits are DIY kits, there are no specific questioning techniques required. Students can read the questions and answer them in any order, skipping those not of interest. Props may be used or discarded. Moreover, these kits are not specifically designed to promote visual literacy or print literacy, and no studies have been conducted on their effects. The only set of statistics the museum has with respect

to the kits is that they were borrowed over 800 times in the last year. However they are unique and provide benefits that the other programs outlined in this paper do not.

When visiting art galleries I have often heard parents warning their children not to touch the artwork. I always found this to be an issue when going on field trips to museums and galleries with my elementary students. However it is easy to understand why children would want to touch rich paintings and sculptures that are so inviting, especially for tactile learners. Providing students with a kit of objects that they are allowed to manipulate helps to solve this challenge that could exist when participating in other programs such as VTS, or STW.



Fig. 19

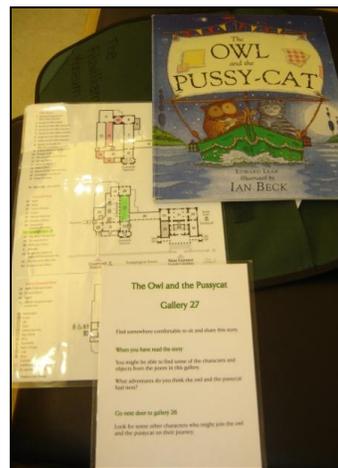


Fig. 20



Fig. 21

Examples of the kits include a Test Your Metal kit (Figure 19), a Story Starter kit (Figure 20) and a Doodle Box (Figure 21). The Story Starter kit that I examined included the story “The Owl and the Pussycat” by Edward Lear and a series of questions. It directed students to go to gallery #27, read the story and look for some of the characters and objects from the poem in the gallery, then move to gallery #26 and find some characters who might join the owl and the pussycat on their journey. I found this interesting as these galleries were ceramic galleries displaying plates and vases. Many of them had paintings on them, but were small and based on my experience, would probably not captivate the interest of children. However, this kit did bridge the gap, offered something interesting and familiar to children, and encouraged them to explore the gallery with something specific to find.

This kit did provide some visual literacy learning that could aid in the development of a foundation for print literacy by providing connections between the familiar (home/stories already familiar with) and the unfamiliar (visual artwork in the museum), resulting in student engagement and motivation. Students used their visual skills to examine the objects in the gallery while looking for specific images. While the kit did not require any form of follow-up or discussions to interpret the objects or the images on the objects, it could easily act as a basic introduction to visual literacy and print literacy. Teachers could encourage some discussion, particularly when the students were required to find characters to join the owl and the pussycat. For example, questions concerning which characters are found, where they would travel to, and on which pieces of artwork the characters were found could easily ensue.

The Doodle Box was an interesting box because it contained many different items that children could pick up, use, try on, or play with, such as a paper cup, plastic glasses with a nose and moustache attached, a plastic butterfly, and a kaleidoscope are only a few examples. Attached to each item was also a laminated card with directions, such as examining various vessels in a gallery and then drawing on the paper cup provided in the box, wearing the plastic glasses and quickly looking at someone in the gallery and draw them before they move, or finding as many different types of wings and deciding which ones he or she would like to wear and deciding where to fly.

The Test Your Metal box contains six activities spread throughout the museum and contained items such as a trowel, a spoon and a keyhole. It also contained laminated photos of objects in the museum with directions on the back of each card. Students are required to look at the object, read the card to find out more information (such as the keyhole is called an escutcheon) and find similar items in the galleries.

The Doodle Box and Test Your Metal kits do provide some visual literacy practice. As students move through the activities they are asked to look for particular objects, interpret their possible uses and meanings, and apply them to their own lives and situations. Again, since no discussions are mandatory, the kits as they are only provide basic visual literacy practice, but with added discussion, deeper analysis and understandings can be reached.

In addition, as previously mentioned, because of the nature of the kit, students can choose items that interest them and participate in the activities that they want to, thus leading to authentic learning engagement. Students will be more likely to be motivated, engage in activities, and remember what they learn if they are given some freedom to choose some activities. The popularity of the kits shows that students are motivated to use them and enjoy interacting with the objects in the kits and the artwork in the museum.

The kits as they are could be a first step in visual literacy development. The pre-made kits are easy for teachers to use in the museum, but what about in the classroom? While it could take some time to put a similar kit together, once it is created it could last a long time. Manipulatives could easily be used and passed around among students. Depending on how they are used, they could aid in engagement, bridge the visual artwork with the classroom environment, and make connections between the students and the artwork.

A Review of the Approaches

After reviewing these approaches, the reader may wonder what strategy to follow teaching visual literacy when keeping in mind its significance to print literacy. VTS is a strategy that works very well with visual artwork such as paintings and drawings. VTS

questioning techniques fully engage the viewer and focus on visual literacy. However, it does not take into consideration picture books as a whole and their unique importance and contribution to visual literacy. Unlike VTS, WBA focuses on picture books and the importance of the text and images coming together to form a unified whole. Examining the book as a whole engages readers and helps them think critically about the book as a whole. However, it does not directly focus on expanding visual literacy. Finally, the STW approach encourages students to stop, look and think about the illustrations in a book, it does not encourage students to interpret the illustrations and examine the nuances and their importance to the story and text enough. Therefore, in order to fully expand students' visual literacy experiences I suggest carefully combining the three approaches previously discussed. The following chapter provides an example of determining questions designed to engage students, encourage them to examine and interpret the images from various viewpoints and participate in in-depth discussions concerning elements that overlap with visual and print literacy, resulting in a complete visual literacy experience designed to strengthen the foundation needed for literacy.

Chapter 5: A Suggested Approach

The previous chapter reviewed some of the programs currently available for developing visual literacy. This chapter exemplifies an approach that focuses on visual literacy in order to specifically develop a foundation necessary for reading.

Although the search for visual artwork has been narrowed down from general artwork to picture books, specific picture books still need to be chosen to use with the students. With so many picture books depicting different stories, styles, artwork, and themes, how can we choose a “good” picture book for our purposes?

Choosing Specific Illustrations

The first step in choosing specific illustrations is to choose quality picture books. A good place to start is by examining books that have won awards, such as the Caldecott award. The evaluation criteria, determined by the United States Association for Library Service to Children (2012), state that the picture book should be a book that provides a child with the opportunity to receive a visual experience; it should be one that has a collective unity seen in the story line, theme, or concept that is developed through the series of pictures in the book; it should be a book with children as the intended potential audience; and shows respect for children’s understandings, abilities, and appreciations; it should display excellence of execution in the artistic technique used; it should display excellence of pictorial explanation of story, theme, or concept; it should show an appropriateness of style of illustration in relation to the story, theme, or concept; and it should display a delineation of plot, theme, characters, setting, mood, and information presented through the accompanying pictures. Given these strict criteria, picture books that have won a Caldecott medal should be appropriate for children and provide a solid visual experience for visual literacy programming.

However, no matter what award a book has won, if any at all, I strongly believe that the book should have some significance to the teacher in some way. The teacher must, at the very least, *like* the book. Perhaps he or she finds the illustrations to be charming, or relates to the moral of the story, or is fascinated by the method the artwork was created. If the instructor does not find the picture book appealing, then this will be reflected through the entire process and students will easily pick up on these emotions. Once a suitable picture book has been chosen, the instructor can move on to choosing specific illustrations.

Capturing Interest

The Gestalt Laws of Perceptual Organization were founded by Max Wertheimer, Wolfgang Kohler and Kurt Koffka and explain how objects are perceived. There are five “laws”, or principles, including the law of similarity (similar items are grouped together), the law of *pragnanz* (objects are reduced to the simplest form possible), the law of proximity (objects near each other are grouped together), the law of continuity (lines follow the smoothest path), the law of closure (objects grouped together are seen as a whole).

These laws play an important role guiding the creator of images because they encourage involvement between viewers and the image and encourage them to construct their own meanings. According to Eppler and his colleagues at the University of Geneva (2012), a good visualization is one that is appealing and also leaves a part of the image unfinished so that the viewer must somehow complete the image. This is echoed in many advertisements; the best visualizations in advertisements are the ones that play with Gestalt Laws, evidenced in many of the winnings at the Cannes and Clio Advertising Festivals. If this is true, then perhaps illustrations that make use of these laws would be suitable in visual literacy development such as in the following example taken from the University of Geneva’s website. This advertisement was from Romania and was comprised of the following three images, displayed separately. They are based on the Law of Closure, where similar items tend to be grouped together to complete the image in the viewer’s mind.

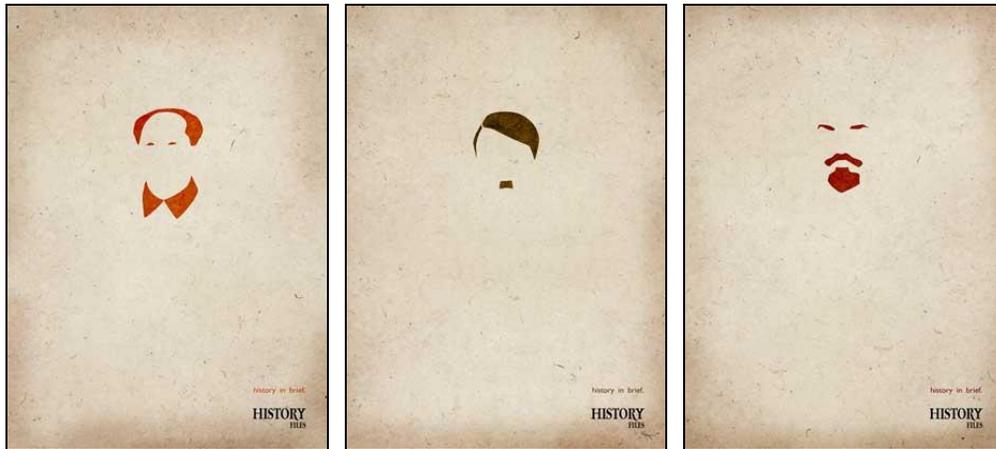


Fig. 22

Fig. 23

Fig. 24

The images are very basic and lack details. However, their incompleteness draws the viewer in and, due to the Law of Closure, the minimal information is automatically used to form the shape of a head. The viewer “connects the dots” and interprets the shapes and colors to make meaning. In Figure 22 we see shapes and interpret them to be a collar and a balding head. Furthermore, the red color is symbolic of the communist party. The viewer puts these clues together to determine that this is an image of Mao. Figure 23 is only comprised of two shapes. The viewer automatically uses the Law of Closure to complete the image as a head. Moreover, the two shapes become interpreted as hair with a side-part and a small mustache. The color is brown, symbolic of the Nazi party. Thus the viewer puts these clues together and determines that this is an image of Hitler. Similarly, Figure 24 has specific shapes that can be interpreted as a goat beard, mustache and eyes. These shapes, along with the red color, lead the viewer to interpret the image as Lenin.

While young pre-readers probably would not understand these images, many adults are able to determine the identities of the figures in the images. Adults will be able to make connections with the images by remembering actual experiences with these leaders or perhaps visits to their countries. Questions can be asked of the images such as what do they mean? Why are they used in an ad campaign? What are they promoting? Viewers can be prompted to use their imaginations and create mental images of the actions and outcomes from of these leaders. Viewers make inferences as they examine the images and come to conclusions about the subject of the images and

their possible meanings. Finally, the images can transform viewers as they contemplate powerful meanings behind the images. In other words, there are ample opportunities for adult viewers to make connections, ask questions, visualize, infer and transform; viewers can practice strategies of proficient readers. Therefore, perhaps illustrations that take advantage of Gestalt Laws would be excellent illustrations for visual literacy learning.

Likeability

Preferences relating to story text and to illustrations play a role in the books that children choose, read and the degree of attention paid to them. If they like the illustrations and the themes are captivating, children will pay more attention to them and be more motivated to participate, examine the illustrations and remember the text. These ideas are mirrored in the advertising world with research in image likeability with respect to advertisements which highlight the importance of liking an image because of its correlation to the amount of attention paid to it. It is claimed that likeable advertisements are better at interrupting the scanning phase of consumers — also referred to as the stopping power of advertisements — improving processing, and producing more positive judgments of the message and, hopefully, the brand (Eppler et al, 2012).

If we consider the cover of a picture book as an advertisement for the book, I believe that a type of “stopping power” of picture books also exists. If this is true, then likeable covers of picture books should be better at interrupting the scanning phase of readers, which would occur as students walk through libraries and bookstores scanning the books until one catches his or her eye. We have all heard the phrase “you can’t judge a book by its cover”, but this is exactly what pre-readers do. In fact, according to Nodelman (1988), illustrators “often try to create appropriate expectations by pictures on covers or dust jackets that appear nowhere else in the book and sum up the essential nature of a story” (p. 49). Pre-readers cannot read the reviews or even the full titles of books. They rely on the illustrations. And honestly, have you ever gone to the library and glanced at the books on display, judging the content by the cover?

Biel argues that consumers are more likely to pay attention repeatedly to likeable advertisements. Eppler notes that if a first impression of an ad is favorable, then viewers

are likely to continue examining it and process it more fully (Eppler et al, 2012). I believe the same can be said for picture books. I have often found that students pay attention to and repeatedly return to likeable books.

Eppler and his colleagues explain that a well-liked advertisement benefits information processing by creating positive feelings, improves recall of the material, and produces positive judgments of the advertised messages. Additionally, Youn and Wells (2001) have found that “favorable feelings influence memory at the time of stimulus encoding, influencing how the information is organized in memory and highlighting specific features that will later be retrievable. Thus, positive effects may be used by viewers in encoding, storing, and then in retrieving. According to du Plessis (1998) and Rosberger et al (1995), viewers usually examine an advertisement for less than three seconds. If likeability can influence encoding, storing, and retrieving information based on viewing an advertisement image for less than three seconds, it is reasonable to assume that likeability plays a role in visual literacy development when using images that are examined for much longer periods of time. Moreover, perhaps these favorable feelings can transfer from visual literacy to print literacy as well, resulting in a more positive attitude towards reading in the future.

However, when providing a book to a classroom full of students a teacher will never be able to please everyone on all aspects. Some students will be captivated by the story line while others will not like it, and some students will be attracted to the illustrations while others may not pay attention. Any one particular book is unlikely to attract everyone, so it is important for educators to provide a variety of books so that children can be exposed to many story styles and illustration techniques. When it comes down to it, a teacher will often choose a book based on one or two criteria to share with the entire class. Perhaps the book fits in with the monthly theme, or it portrays an illustration technique that the teacher would like to highlight, or perhaps the story is about something that also happened in the classroom or in students’ lives.

Aesthetics

There is also an aesthetic factor that comes into play when choosing books. Students and educators will have an aesthetic response and an emotional response to

the artwork in the books. This involves affective and cognitive understandings, which may change over time (Kiefer, 1994). Some researchers such as Anderson (2002) believe that the illustrations are more important than the text in picture books because of the emotional, aesthetic responses that can be sparked.

The aesthetic factor of picture books cannot be ignored. Aesthetic experience is a complex process that consists of cognition, perception, and emotional or attitudinal reactions and also involves predispositions. It can change during the course of reading and can be modified after the work has been read, and may also result in modification of concepts, attitudes or feelings (Purves & Beach, 1972).

Abigail Housen has researched aesthetic development extensively and has developed a theory she calls the stages of aesthetic development. In numerous well-documented studies, dating as far back as the 1970's through today, she has shown that "if exposed to a carefully sequenced series of artworks, viewers' ways of interpreting images evolve in a predictable manner" and "given certain key elements in the design of aesthetic encounters, growth in critical and creative thinking accompanied growth in aesthetic thought. In other words, in the process of looking at and talking about art, the viewer is developing skills not ordinarily associated with art." (Housen, 2002) Through these studies, Housen developed aesthetic stages that are characterized by a set of interrelated attributes. Within each of the five stages, viewers have their own particular way of making sense of the image.

Since I am focusing on young students who are just beginning to read, I am only concerned with Housen's first stage. For a complete list of Housen's stages, please see appendix E. This stage is called the Accountive Stage where viewers are list-makers and storytellers. Students in this stage often tend to make simple concrete observations and incorporate objects and people into a narrative. Judgements are made on what the viewer likes and knows. According to Housen (2007), "The Stage I viewer (the "storyteller") and the image (the "story") are one. The viewer engages in an imaginative, resourceful, autonomous, and aesthetic response" (p.3). Housen's colleague, Philip Yenawine (1998), explains "aesthetic learning occurs when the viewing experience addresses the needs and concerns of viewers, and appropriately challenges their abilities" (p.1). Images should be chosen so that they are linked to viewer's interests,

strengths and areas of potential for growth. However, not all visual art is the same, equally interesting, or equally accessible in terms of meaning to all viewers. As previously discussed, this is also a challenge that exists in choosing picture books.

Other Aspects to Consider

According to Housen (2002), there are nine aspects to consider when choosing visual images for visual literacy purposes. They are: accessibility, expressive content, narrative, diversity, realism, themes, media, artistic genre, and sequences. Firstly, the artwork must be accessible to the viewers. This means that the viewers must be able to make sense of the images; they should include identifiable people, actions, interactions, settings, and/or emotions (Housen, 2002). Second, the images should be open to interpretation so that several possible meanings can be constructed. Third, narrative images are suggested for beginners because young children tend to look for stories in the artwork (as outlined in Housen's aesthetic stage 1). Fourth, the art should be somewhat diverse in time and culture so that a wide range of art can be experienced. Fifth, Housen suggests that, stylistically, varied forms of realism are the most useful for beginning viewers. Next, the artwork should be presented as a series. For beginning viewers, the unifying feature should be obvious, such as playing games, rather than something subtle such as joy. Seventh, almost any media can be used, from paintings, drawings, photographs, or sculptures, as long as everyone can see the artwork (the scale is not too small or glass does not glare). Eighth, Housen suggests that various categories of art, such as land-, sea-, or city-scapes, or portraits, should be provided in order to lay a foundation for conscious awareness and later appreciation. Finally, the images should be put into a sequence, usually from simple to more complex.

While all of these aspects are important when selecting visual artwork in a gallery for examination, not all of them need as much consideration when choosing illustrations from picture books. Most picture books are written and illustrated with children as the implied readers. Therefore, the illustrations should already be accessible; the people, actions, interactions, settings, and/or emotions should be identifiable and appropriate for most children. Second, picture books usually include illustrations that are open to interpretation. They usually do not match the text word for word like the illustrations in beginning reader books. Third, the illustrations automatically form part of a narrative.

Fourth, there are many different picture books available and teachers can easily choose ones that are diverse in time and culture, and portray various media and categories of visual artwork, such as the many versions of Cinderella. Fifth, Housen suggests focusing on forms of realism. Many, but not all, picture books already do contain illustrations of this nature. Finally, most illustrations in a picture book already form a series and can be considered to be pre-sequenced.

It should be mentioned that although these aspects are usually automatically acceptable in artwork found in picture books, not all children's picture books are appropriate for all classroom projects. For example, the book *One Dad, Two Dads, Brown Dad, Blue Dad* by Valentine (2004) is a picture book with children as the intended audience but the themes in the book are sensitive and some parents may find it to be an inappropriate book to be used in a school setting.

Although educators should not consciously avoid using artworks as part of their curriculum, using picture books can be more appealing than stand-alone visual artwork as many of the aspects have already been considered because of the nature of picture books. This makes it easier for teachers to use picture books in a visual literacy project than arranging gallery visits and choosing original artwork.

Structuring the Discussion

For the very first visual literacy discussion with a group of students, I recommend choosing a book that students are not familiar with, but does include a subject and/or characters that the students will like and relate to. If students already know the story and are familiar with the illustrations, it will be more difficult to encourage them to explore "what if" type questions with an open mind and come up with creative ideas. If even just one student shouts out "I know what happens!" and blurts out a surprise ending or points out important inconspicuous images in the text, it could make it more difficult for others to continue with a non-subjective thinking process. This being said, not every picture book analysis must be done with a brand new book, but I recommend it for the very first picture book analysis to encourage each child to participate in the discussions with an open mind and imaginatively.

Once a picture book has been chosen based on the children's interests and themes that are currently being discussed in the classroom, a discussion needs to be structured. Before teaching the picture book the teacher must be very familiar with it, have thought about the illustrations, the text, and their relationships, and how a unified artistic whole has been created. A lot of planning must be undertaken.

I suggest choosing three illustrations in the same book to analyze with students. Fewer than three illustrations may not be enough to convey a storyline and more than three illustrations could be overwhelming for students to analyze in depth. Choosing an illustration near the beginning, one in the middle and one near the end of the book is a good start. Although the final illustration can be chosen for discussion, care should be taken not to give away the ending of the true story. This will encourage more discussion about the possible storyline and connecting thread between the illustrations. It will also ensure student interest when actually reading the picture book at the end of the book analysis because the true ending will not have been given away. An example is provided in the following chapter.

Once the three illustrations have been chosen the discussion must be structured. Questions need to be developed to guide students through an in-depth analysis of the illustrations. This can be a challenging process as the questions must be relevant to the specific illustrations, challenge the students, be open-ended enough to encourage discussion but also specific enough to direct students' thinking.

One way to ensure appropriate questions are developed is to examine how children verbally respond to picture books. Kiefer (1995) has developed a classification system that highlights the four main ways children tend naturally to respond to the illustrations in picture books. It should be noted that these are not the only ways children respond to picture books. Arzipe & Styles (2003) documented additional types of responses such as questioning, wondering, exclaiming, contesting, and comparing. However, Kiefer's set continues to show the four dominant categories. Kiefer (1991) believes these categories are useful because they help educators "understand how children *learn how to mean* in the world of the picture book" (p. 67). The categories include informative (provides information), heuristic (problem-solving), imaginative (creating, participating in an imaginary world) and personal (connecting to individual

experiences, emotions) responses. This means that students will naturally make comments, ask questions and construct meaning about the illustrations in these four ways. By structuring the discussion questions on the natural responses of children, we can reasonably assume that young children should be able to examine the artwork, connect with the illustrations, respond comfortably, and engage in an analysis designed to optimize visual learning and overall literacy achievement.

However, simply asking informative, heuristic, imaginative and personal questions is not enough to encourage a complete visual literacy experience in order to build a print literacy foundation. The questions need to be designed in order to direct students' thinking about important literacy components such as symbolism, encoding, decoding, sequencing, effects of the elements and principles of art, characters, plot, and theme. Students also need practice with making connections, questioning, using their imagination, inferring and transforming so that they are ready to use these techniques when reading.

In order to accomplish this, I have organized the questions into three categories: concrete, artistic and literary, merging aspects from art criticism and literary analysis. The first category reflects Housen's research on aesthetic development; young viewers tend to respond to artwork with narratives based on concrete ideas. This encourages students to look at and respond to the illustration in a comfortable, narrative manner, which is especially important at the beginning of the discussion when students are examining new images.

The second category encourages students to examine, discuss and analyze how artistic elements help to structure and provide meaning to the pictorial form. Providing a model of appropriate vocabulary and critical commentary helps children discuss and interpret these abstractions. Examining artistic relationships such as the way colors, lines, textures, shapes and values work together to achieve unity, movement, balance, rhythm and emphasis, and in turn provide meaning to the viewer can help readers practice and develop visual literacy and better understand the illustrations.

The third section focuses on literary elements as they are depicted in the image, providing a direct bridge between visual literacy and print literacy. This is the element

that tends to be missing from the other visual literacy programs that concentrate on stand-alone visual artwork. Literary elements, such as character, mood, setting, and validity are incorporated into illustrations in picture books and relate to the story written in text. For example, an illustrator may choose darker colors and use angular shapes with thicker lines to help portray Little Red Riding Hood as a scared young girl in the dark forest. Discussing literary elements introduce young children to these terms and help them understand their meaning and importance in both artistic and literary settings.

Developing the Questions

As previously discussed, if a viewer assumes a deeper meaning in the image, then more complex thinking will take place. It is important that teachers cultivate more complex thinking and encourage deeper analysis and thought with respect to the illustrations in order to develop visual literacy. The three images must be analysed separately and later together as a set. The ways in which the images relate to each other and the changes that occur between the images should be examined. The teacher must encourage discussion that moves from narrative responses to deeper analytical responses. Different interpretations of the illustrations can be discussed and the ambiguity of art and the variety of meaning can be discovered.

Comments and questions within each of the categories need to be carefully planned. As in the steps involved in creating the inquiry plan with the Guggenheim Museum, I suggest brainstorming several questions for each category. Moving from observational questions to more interpretive questions occurs as we move through the categories, mirroring the way we learn from first general and simple ideas to more advanced and complex concepts.

After brainstorming questions in each category I suggest following step 5 of the Guggenheim Inquiry Plan, which includes rereading the questions and eliminating closed-ended, age-inappropriate or irrelevant questions by asking: Is this question open-ended? Are there many possible acceptable answers to the question? Does this question give students the opportunity to build on prior knowledge? Will students have to look carefully at the artwork to answer this question? Will they be able to answer it by looking at the artwork? Is this question the best one to get students to think about the

theme? This helps educators choose the best question for the particular group of students in each category and becomes the key question for each category. The follow-up questions encourage students to re-examine their ideas and scrutinize the illustrations more closely. This planning stage can be a lengthy process and must not be ignored or rushed, as a full, dynamic discussion rests on guiding students through a proper, well-rounded discussion that touches upon key elements. It also ensures that the educator is fully prepared for the discussion and has thoroughly examined the images and the text in the chosen picture book.

Kalantzis and Cope on Meaning

Literacies by Kalantzis and Cope (2012) is a book that “focuses not only on reading and writing, but also on other modes of communication, including oral, visual, audio, gestural and spatial. This focus is designed to supplement, not replace, the enduringly important role of alphabetical literacy” (p. i). While the authors explain that visual modes are important because they supplement alphabetical literacy, I believe that the timing of this supplementation is also important because it should be placed prior to or at the beginning of alphabetical literacy learning in order to strengthen the alphabetical literacy foundation.

Without using the specific term *visual literacy*, the authors describe visual forms of communication found in artworks including picture books and treat it as a viable form of literacy and method of communication. In fact, the authors discuss seven modes of making meaning including written, visual, spatial, tactile, gestural, audio and oral, and use the term *synaesthesia* to describe the “process of shifting backwards and forwards between different modes... [it is] the process of expressing a meaning in one mode, then another. You can describe a scene in words or you can paint a picture of the same scene” (Kalantzis & Cope, 2012, p.195). Although these ideas have similarities to my goal of using visual literacy as a foundation for print literacy, ultimately it is not the same as my goal; I am not asking students to analyze a picture and then write about it, nor am I asking students to write a poem and express the poem in images, such as with the interarts analogy examples in Chapter 3. However, by examining the interplay between these different modes, Kalantzis and Cope have developed a set of questions that form the basic building blocks of meaning. This means that one can ask these same

questions no matter what mode of meaning making is used. This provides a common language that gives one the opportunity to move between the modes more easily.

A basis for questioning and determining meaning that can be used in any mode is important because it can provide students a basis that they can use to *extract* meaning from a viewer's point of view using various modes as well as *infuse* meaning from a creator's point of view. Once students practice and understand these questions in one mode, the visual mode in my case, moving on to using them another mode, namely an alphabetical mode, should be easier than starting from the beginning with no experience at all.

The five basic questions that Kalantzis and Cope (2012) use are as follows:

1. Reference: Who do the meanings refer to?
2. Interaction: Who and what do the meanings connect with?
3. Composition: How do the meanings hold together?
4. Context: Where and when are the meanings situated?
5. Purpose: For whom and why are the meanings there?

Although I do not use the same terms, my questions include questions that cover similar topics, as shown in the following section. Since students will be using the same types of questions for determining meaning when reading, it can be assumed that transfer between visual literacy and print literacy will be encouraged.

Sample Questions

Questions in each category are designed to flow from simple descriptions and narratives to more complex applications and critiques, functioning similarly to Bloom's taxonomy. Since this process is meant to be used with young students, it should be child-friendly so that the discussion provides students with a positive experience. Using Keifer's four categories outlining the four ways children naturally tend to respond to artwork helps to create a suitable questioning structure. The question categories also overlap with Kalantzis and Cope's questioning model that form meaning in both visual and alphabetical modes of communication. Questions that fall under the personal category also help students connect with the images, motivating them to actively participate. The follow-up questions encourage students to continue examining the artwork, looking for details and hidden meanings after they have answered the initial key

question. This serves to keep the students focused on the image and encourages them to continue to find details and question their meaning. By participating in the discussion and using visual literacy to interpret the artwork, students are encouraged to practice many of the strategies that Adrienne Gear stresses as being important in becoming successful readers.

The following chart shows sample questions that may be used and adapted by educators. Each category has a few sample key questions as examples (although only one key question per category is recommended when actually discussing the images), with follow-up questions that encourage complete discussions. Educators should choose the most suitable key questions for their particular set of students and the chosen image. The final set of questions should be a set of 12 solid key questions that form the basis of discussion, discovery and visual literacy enlightenment.

Concrete Questions

Informative Key Question: Who/What do you see in the illustration?

Follow-up: What makes you say that? What else can you find?

Heuristic Key Question: What is going to happen to him/her? Is he/she about to fall?

Follow-up: What makes you say that? How does the image tell you this? What else can you find?

Imaginative Key Question: What do you think these characters would say to each other? What do you think is hiding in the basket?

Follow-up: What makes you say that? What else can you find?

Personal Key Question: Have you ever seen a dog that looked like that one? Is the character telling you something?

Follow-up: Tell us about it. When? Where? Why?

Artistic Questions

Informative Key Question: What colors/lines/shapes do you see?

Follow-up: How does the artist use the colors/lines/shapes to depict the characters/objects? What makes you say that? What else can you find?

Heuristic Key Question: What type of paint was used in this illustration? Why was this media chosen? What style of painting was used?

Follow-up: What makes you say that? What else can you find?

Imaginative Key Question: Would the image have the same effect if the characters were in a different location?
Would the illustration be successful if it was created from collage rather than photography?
Follow-up: What makes you say that? What else can you find?

Personal Key Question: Have you ever painted with watercolors/ made a collage/etc.?
Follow-up: Tell us about it. When? Where? Why?

Literary Questions

Informative Key Question: What characters are in the story? Does the picture remind you of another story?
Follow-up: What makes you say that? What else can you find?

Heuristic Key Question: What do you think the character will do to fix this? How are they going to get out of there?
Follow-up: What makes you say that? What else can you find?

Imaginative Key Question: Imagine if you were in the picture. What can you see that we, as viewers of the image, cannot see? Why did the artist make the picture from this particular perspective? Would it be better if it was painted while standing on the other side of the room?
Follow-up: What makes you say that?

Personal Key Question: Did that ever happen to you? (event that happened in the story) Have your parents ever told you to look both ways before crossing the road? (moral of the story)
Follow-up: Tell us about it.

Conclusions

Look at the three illustrations together.
Are they a set? Why/Why not?
Do they tell a story? What is the story?
What order should they go in? Why?
What connects the images together?
What similar things/characters do you see?
Are the lines/colors/styles the same?
Do they all portray the same mood?
What makes you say that?
What do the three pictures together remind you of? Why?

Going through the entire 12-step questioning process enables students to develop their visual literacy and prepare for future reading. A worksheet is provided in

appendix F to help educators plan an effective discussion. It can be used to guide educators through the planning process to ensure that all aspects are covered in the questioning process resulting in a cohesive discussion regarding the chosen illustrations. Once educators are familiar with the process, they can always adapt the worksheet to their own needs.

Engaging the Students

Once the planning stage is complete, teachers can present the material to the students. The following provides some suggestions on how to present the images in the picture books to students in order to create an optimal discussion and visual literacy experience.

Many educators I have spoken with tend to do a picture walk with students when introducing a new book. They have told me that this helps students get excited about the book, captivates their attention and activates prior knowledge. However, I do not favour picture walks because a large part of the magic of picture books is discovering the story along with the illustrations. Suspense is often created at the end of each page, encouraging readers to turn the page to discover what happens next. Twists and surprise endings delight readers. I believe that picture walks can ruin the experience of anticipation and surprise that help create the magic in picture books. Students will not hypothesize and visual interpretation during the reading of the text will not be encouraged. Moreover, because the students will be creating their own storyline with the three images, showing the book to the students at the beginning of the process will take away from their imagination and ability to compose their own plot lines. Therefore, educators should jump right into the first illustration, without even telling students the name of the book or even the fact that the illustration comes from a book. Reading the picture book in its entirety comes at the end of the visual literacy process.

Each illustration should be examined as a separate piece of art and provide students with a distinct experience. They do not need to be shown to the students in the same order as they appear in the picture book, and only one illustration should be discussed per class. This will discourage one discussion from directly influencing

interpretations of the next illustration and corresponding discussion. Of course, there will be some overlap, but new and fresh ideas will be more likely to be presented and discussed if the illustrations are examined on different days. A concluding session will be conducted where all three illustrations are presented to the class and compared by reviewing the questions that were posed in each category with respect to all three pictures. Students can then examine the illustrations as a set, and create stories and even their own illustrations to accompany them. Then, like the Whole Book Approach (WBA) at the Eric Carle Museum, educators should show the picture book at the end of the process. The images, the text and their relationships should be examined. The book as a whole should be read, going back and forth between pages, looking at how everything relates to each other. Even aspects such as the endpapers can be examined and discussed. Going through the picture books slowly and interactively will elicit imaginative, rich, sophisticated interpretations. As mentioned in other approaches such as the WBA and VTS, educators must not rush the discussion process; teachers need to pause after reading each page and wait for responses before making comments and asking questions. In the final phase, educators should follow the children's lead, connect children's responses, and probe to encourage deeper and more critical thinking.

Follow up and extension activities could include comparing illustrations from the same illustrator in different books, having students create their own complete books, or even discussing how changing the illustrator would change the overall effect of the picture book. According to Sipe (2008), one of the best ways to increase visual interpretive skills is to read a series of versions or variants of the same story, each with different illustrations. He believes that students will become familiar with the story and images in the first version and then will make connections to subsequent versions by comparing and contrasting the illustrations' details, styles and moods, and what each illustrator chooses to highlight and what each chooses to omit. Another variant of this approach is to read a number of stories illustrated by the same person, preferably with a distinct and consistent style. How can you recognize the artist's work? What are commonalities? This can build up knowledge across cases in an inductive way. The pedagogical implication is that the more cases children have had to consider, the more refined and astute their understanding of style will be.

A Sample Plan and Discussion

This section provides the reader with an example of the suggested methods to enhance visual literacy including a hypothetical discussion that could accompany the discussion questions. The reader is taken through each of the steps and shown how the illustrations, the picture book and visual literacy come together in forming a literacy foundation while highlighting the underlying theories.

Choosing a Picture Book

The first step in enhancing literacy acquisition through visual literacy is choosing a suitable picture book. Some things to take into consideration are student genders, ages, and any particular common interests they may have. This may sway the educator's choice in one direction or another. Since I do not have a specific group of students in mind for this example I have chosen a book that would most likely be appealing to a wide range of students with a theme that the majority of students can relate to and enjoy.

Exactly how do I go about choosing a "good" picture book? It has already been established that student preferences for text and illustrations will influence the amount of attention students will give a book. Obviously, I strive to maximize student attention. I also want the students to have a positive aesthetic response to the illustrations, one that will encourage the natural aesthetic response of storytelling that Housen describes. I prefer to use picture books that students are unfamiliar with so that open-minded discussions and creativity are encouraged. Finally, I personally prefer to choose a picture book that uses a variety of media in the illustrations in order to provide my students with a variety of artistic styles from one picture book discussion (to get the "biggest bang for my buck" as some would say). With all of these ideas in mind, I have designed my own picture book. I would like to stress that this is not necessary in an everyday implementation in a classroom.

My picture book, "Cake!" was designed and written with the primary goal of developing visual literacy among young children. When deciding upon a suitable storyline for the book, I thought about the things that young children enjoy. I wanted to

create a book that children could relate to, and of course, enjoy reading. I realized that in all of my experience as an elementary teacher and parent, I have never met a child who did not get excited about birthday parties. When I asked a few children what they liked about them, I always received excited answers that included the ideas of receiving presents, playing games and eating cake. Both boys and girls of varying ages often conveyed these ideas very enthusiastically and thus the idea for my picture book was born.

Once I established an overall idea for a book, I thought about the dimensions of likeability as described in advertising. If a likeable advertisement is easier to recall, favourable feelings influence memory at the time of encoding, and these favourable feelings are transmitted towards the brand, perhaps a similar process could occur when examining illustrations. In any case, a likeable book is much more desirable than a non-likeable book. Therefore I attempted to create a book that is entertaining (the clues throughout the book and the rats having a party are entertaining), relevant (most children can relate to having or going to birthday parties), empathetic (children can identify with getting in trouble, going to a party, and perhaps not being invited to a party), and not too familiar or boring (the use of different media and looking for and interpreting the clues throughout the book adds interest).

The result is a mystery picture book about a cake that goes missing. It is a unique book that tells the story from multiple perspectives. Different media depicts various viewpoints, providing the reader with different clues about the missing cake. Some clues are logical and valid while others are impossible in real life, which adds intrigue and humour. It is not until the end of the book when readers discover the true reason and location of the missing cake. An engaging plot, coupled with captivating illustrations provides the reader with many opportunities to develop visual literacy and ideas for discussion.

Choosing the Illustrations

Once the picture book has been chosen, the illustrations to be used in the analysis and discussions must be chosen. Although the entire picture book is not

included in this paper, an outline is included in appendix G so that readers can preview the story and illustrations.

The previous chapter outlined Housen's nine aspects to consider when choosing visual artwork for children to examine. These included accessibility, expressive content, narrative, diversity, realism, themes, media, artistic genre, and sequences. As previously mentioned, not all of these need to be carefully considered when choosing artwork from a children's picture book because of the overall nature of picture books. For example, the illustrations in "Cake" were created with children as the implied readers so most children should be able to identify the characters (young girl and boy, mother, cat, and mouse), their actions (reading, playing games, having a snack, having a party), the settings (a family room, kitchen, mouse house), and the emotions (surprise, wonder, happiness) that are portrayed. The themes in the book are suitable for children. The illustrations do not exactly match the text and are open to some interpretation, but at the same time form part of a narrative and are pre-sequenced. The illustrations in the book also already use several different forms of media (pencil crayon, collage, graphite, watercolor, photography) and are realistic in nature (as opposed to abstract).

After reviewing my picture book and examining the illustrations, I chose the following three illustrations for my analysis. The first illustration is a picture of the girl in the kitchen who discovers that the cake is "missing". She does not see the tail of the mouse on the fridge, nor the dollop of frosting that could fall on her head. I chose this image because it has the potential for an in-depth discussion because a lot of things are happening in the picture that the girl does not see. The second image I chose was from the perspective of the cat. It is a unique picture because of the perspective and lack of color. The last image chosen for discussion is of the mice having a birthday party. I decided to use this image in my discussion because it is an interesting picture with a lot of things happening in it. I believe that students will find it amusing and will be able to connect with the picture easily. The students will discover the location of the cake and why it was stolen, but will still have to guess how the mouse moved it into his house while keeping the cake intact. The usage of multi-media should also hold students' interest and provide a good topic of discussion. Finally I looked at the three chosen illustrations together. Were they sufficiently different from each other? Would they be able to be interpreted differently? Would my students find them interesting and create

some sort of storyline to accompany them? I decided they would make a good basis for a discussion and analysis for my students, and continued with the next step of creating discussion questions. As with many picture books, these illustrations accompany the text and provide additional information. The text and illustrations work together to create a complete experience for the reader, encouraging readers to make connections between the two and creating what Rosenblatt refers to as a “live circuit”. The gaps between the illustrations and the text draw the reader’s attention to the book and aid in the development of visual literacy. The questions developed in the discussions help to steer students toward these gaps, develop multiple levels of meaning, make inferences and discuss them with their peers.

Forming the Discussion Questions

Once the illustrations were chosen I planned my unit by creating key questions in each category. The first time I attempted this task I found it fairly difficult and rather daunting. I brainstormed a lot of questions, but many of them overlapped and it was difficult to create some sort of order to them. Therefore I developed a series of planning worksheets to lead educators to create an effective and organized discussion plan.

I began with Planning Worksheet A that has a list of possible artistic and literary themes from which to choose. Educators may begin by choosing from this list, or choosing from their own themes for discussion. I began by looking at my illustrations and the list of artistic and literary themes. Which themes could be examined easily in my chosen illustrations? I decided to examine color and plot with illustration #1 because I thought they would be easier concepts for students to grasp and discuss. I chose value and characters for illustration #2 because I wanted to focus on the black and white color scheme and the fact that the cat is the central character. Finally with illustration #3 I decided to focus on texture and setting because of the nature of the collage and the change of location from the children’s house to the mouse’s house. The following is my completed worksheet A.

Planning Worksheet A: – Choosing Themes

Title of Book: Cake!
Author: Catherine Read
Illustrator: Catherine Read

Brief overview: While two children are playing, various items from the living room and kitchen go missing, including a birthday cake. When questioned by their mother, the children quickly blame each other for the missing cake. The only member of the household who really knows who stole the cake is the pet cat! What will he find when he tracks down the thief?

Possible Artistic Themes: Color, value, texture, form, line, shape, space, emphasis, balance, harmony, variety, movement, rhythm, proportion, unity,

Possible Literary Themes: Plot, characters, setting, theme, conflict, point of view

Day 1

Illustration #1: A young girl is in the kitchen and discovers the missing cake.
Artistic Theme: Color
Literary Theme: Plot

Day 2

Illustration #2: The two children blame each other for the missing cake (cat's perspective).
Artistic Theme: Value
Literary Theme: Characters

Day 3

Illustration #3: The rats have a birthday party.
Artistic Theme: Texture
Literary Theme: Setting

Day 4

Artistic Discussion: Media comparison and meaning
Literary Discussion: Combining plot, characters and setting to create a story

Day 5

Story Creation: Students create their own stories based on the 3 illustrations. Students create an additional illustration to include in their stories.
Story Comparison: Teacher reads the picture book in its entirety. Students compare their stories with the picture book.

The next step was brainstorming potential key questions for each category. I found that choosing the themes for each illustration in worksheet A and then creating the questions in worksheet B helped me create a discussion framework that was organized and I could easily use to lead students through a complete discussion.

The first time I assembled my list of questions I discovered that there were two ways of combining the questions. The first method I attempted was categorizing them by having all of the Informative questions together, followed by the Heuristic questions, the Imaginative questions, and finally the Personal questions. It seemed easier to develop the questions this way and I assumed it would be just as easy to lead a discussion with this format as well. However, I soon discovered that it would be better to organize the discussion around the topics rather than types of questions. This helps to create a cohesive discussion that flows naturally rather than one that jumps from topic to topic.

Once my themes were chosen I used worksheet B to brainstorm questions in each of the categories. Then I went through them again, looking for and removing redundant, closed-ended, and hard-to-understand questions. My goal was to choose the best key question for each section to draw student's attention to particular aspects in the illustrations while simultaneously encouraging a vibrant and creative discussion. Worksheet B is included in appendix H. Finally the key questions were entered into the final discussion plan (worksheet C below), resulting in a plan that included 12 key questions and follow up questions for each illustration. This is included below. Note that the follow up questions default to the basic questions "What makes you say that?" and "What else can you find?". However, in some cases these questions have been altered in order to maintain a flowing discussion that focuses on visual literacy. For example, in one section the third question has been changed from the vague question "What else can you find?" to "What else can you find that tells you where she is?". This is a more direct question that focuses on the key idea for that category. In addition, educators must always remember that this is a guide. Depending on how the discussion is going the teacher can always add or alter questions, guiding the students and encouraging deeper responses when appropriate.

Planning Worksheets: Step C – Final Discussion Plan

Day 1

Illustration #1: A young girl is in the kitchen and discovers the missing cake.
Artistic Theme #1: Color
Literary Theme #1: Plot

Concrete Questions

Informative Key Question: Where is the girl?
Follow-up: What makes you say that? What else can you find?

Heuristic Key Question: What is going to happen if she steps to the right?
Follow-up: that? What else can you find?

Imaginative Key Question: What do you think is inside the fridge?
Follow-up: What makes you say that? What else can you find?

Personal Key Question: Do you have pictures hanging on your fridge?
Follow-up: Tell me about them.

Artistic Questions

Informative Key Question: Describe the colors you see (bright, soft, muted, tinted, shaded, light, dark,...)
Follow-up: What makes you say that? What else can you find?

Heuristic Key Question: What kind of media (pencil crayons, paints, photographs, collage, etc) can make colors like this?
Follow-up: What makes you say that? What else can you find?

Imaginative Key Question: What if only one color was used in this picture?
Follow-up: What makes you say that? What else can you find?

Personal Key Question: Have you ever used watercolor paints?
Follow-up: What happened?

Literary Questions

Informative Key Question: What is the girl going to do?
Follow-up: What makes you say that? What else can you find?

Heuristic Key Question: What is her mother going to do?
Follow-up: What makes you say that? What else can you find?

Imaginative Key Question: What if it is a magic cake?
Follow-up: What makes you say that? What else can you find?

Personal Key Question: Have you ever baked a cake?
Follow-up: What happened to the cake?

Day 2

Illustration #2: The two children blame each other for the missing cake. (It is from the cat's perspective).

Artistic Theme #2: Value

Literary Theme #2: Character

Concrete Questions

Informative Key Question: Where are you, the viewer, in this picture?
Follow-up: What makes you say that? What else can you find?

Heuristic Key Question: How would the artist know how to draw this picture? How does the artist know what a cat can see?

Follow-up: What makes you say that? How do things look when you are on the floor with your kitty?

Imaginative Key Question: What if you were a cat? Would looking around our room be different?

Follow-up: What makes you say that? What else can you find?

Personal Key Question: Do you have a pet? A cat?

Follow-up: What does he or she like to do? If you drew a picture from his/her perspective, what would the picture show?

Artistic Questions

- Informative Key Question: What colors do you see?
- Follow-up: What makes you say that? Does anyone know what the word 'value' means?

- Heuristic Key Question: Why do you think the artist chose to make this picture in black and white (different values)?
- Follow-up: What makes you say that? What else can you find?

- Imaginative Key Question: Imagine if you could only see in black and white. How would looking around this room be different? What parts would be a dark value? What parts would be a light value?
- Follow-up: What makes you say that? What else can you find?

- Personal Key Question: Have you ever created a picture using only pencil?
- Follow-up: What makes you say that? What else can you find?

Literary Questions

- Informative Key Question: Whose perspective is this / who is telling this story?
- Follow-up: What makes you say that? What else can you find?

- Heuristic Key Question: Why would this picture be told from the cat's perspective?
- Follow-up: What makes you say that? What else can you find?

- Imaginative Key Question: Imagine you were a cat and you saw everything that happened in your house, but couldn't tell anyone about it. What would you do?
- Follow-up: What makes you say that? What else can you find?

- Personal Key Question: If your cat could talk, would he/she tell on you?
- Follow-up: What makes you say that? What else can you find?

Day 3

- Illustration #3:** The rats have a birthday party.
- Artistic Theme #3:** Texture
- Literary Theme #3:** Setting

Concrete Questions

Informative Key Question: What is happening in this picture?
Follow-up: How do you know? What else can you find that tells you what is happening?

Heuristic Key Question: How did the artist make this picture? Why did the artist use so many different things in the picture?
Follow-up: What makes you say that? What else can you find?

Imaginative Key Question: What does this image remind you of?
Follow-up: What makes you say that?

Personal Key Question: Do you have mice in your house?
Follow-up: What makes you say that?

Artistic Questions

Informative Key Question: What textures do you see?
Follow-up: What makes you say that? What else can you find?

Heuristic Key Question: What media did the artist use to create the rats / the picture?
Follow-up: What makes you say that? What else can you see?

Imaginative Key Question: What other materials could the artist have used to make the rats?
Follow-up: What makes you say that? What else can you find? Why do you think she chose to use plastercine?

Personal Key Question: Have you ever made pictures using plastercine?
Follow-up: What makes you say that?

Literary Questions

Informative Key Question: Where is the party taking place?
Follow-up: Is it a large or a small space? How can you tell? What else can you see that shows the size of the room?

Heuristic Key Question: How did they get the cake into the rat house?
Follow-up: Who brought the cake into the rat house? What makes you say that? What else can you find?

Imaginative Key Question: Do rats really have birthday parties?

Follow-up: What makes you say that? If you had a pet rat, what kind of party would you plan for him?

Personal Key Question: Where is your favourite place to have a birthday party?

Follow-up: What makes you say that?

Day 4

Teacher reviews all three illustrations and displays them at the front of the classroom.

Artistic Discussion: Let's look at the three illustrations again. What media was used in these pictures?
Do they all use the same colors?
Do they all have the same values?
Do they all have the same textures?
Do they make a set? Why/why not?
If they are all part of a set, why were they made with different media?
What if they were the same?
Would they be a set then?

Literary Discussion: Compare plot, characters and setting.
Who are the characters in each illustration?
Why did the artist create him/her this way?
What is the setting in each illustration?
How are the images connected?
Is there a similar theme in all three images?
What order should they go in?
Do they make a story?
Can you create your own plotline for the illustrations?

Day 5

Story Creation: Students create their own stories based on the 3 illustrations.
Students create an additional illustration to include in their stories.

Story Comparison: Teacher reads the picture book in its entirety.
Students compare their stories with the picture book.

The Discussion

The questions are designed to encourage children to examine the artwork, come to their own conclusions, back up their ideas with examples from the artwork, and use expressive language. Moreover, moving through the four categories with students encourages them to think about concepts in different ways – including simple concrete observations, problem solving, imaginative, and personal.

After creating the questions some may start to think that this discussion could be too much for a young audience. However, since the questions are rather simple and focus on only a few major concepts at a time, the discussion can take place easily and quickly. A long, in-depth discussion on one topic would not hold the attention of a young audience. In my experience, fast-paced discussions with a series of different questions usually held the attention of younger students. In addition, combining a few topics from different perspectives should engage most or even all students and help them focus on the task at hand.

The following section provides a narrative of student responses based on my experiences teaching children aged three to six. Since some of the questions are very open-ended, in a true classroom I would expect many different responses, including some not even related to the discussion questions. In addition, children could easily go off on tangents when asked open-ended questions or when asked to explain their ideas or provide examples of similar experiences as those posed in the personal category. It is part of the teacher's responsibility to ensure that these responses are acknowledged, but also curbed so that the discussion continues at a reasonable pace. In order to limit the length of this paper, my example focuses on responses that answer the questions in a brief manner.

Comparing the questions from worksheet B and the actual discussion that follows, the reader may notice that some questions have been omitted, altered or, in some cases, additional questions have been added as a result of the discussion. This is because the discussion should be fluid, student interest should be captivated, and in some cases the teacher may want to draw attention to specific details as the discussion

unfolds while at the same time not compromising the overall flow of the discussion and attention to important details. This is completely acceptable and encouraged. The planning process only serves as a guide in order to help educators develop a well-rounded and in-depth discussion. While the process aids in developing many questions, teachers should also embrace any teachable moments that occur. Educators should try to follow the questions, allowing for some changes while still following the general set of questions. If time and student attention allows, teachers should feel free to digress a little and explain other concepts and ask additional questions, encouraging students to come up with ideas, hypotheses, and link concepts to personal experiences. For example, in the discussion below, sometimes the students showed a lot of energy and interest, thus additional questions were asked in order to guide the students to coming to a deeper analysis. An example can be found in day 3 in the concrete personal question category (see question 3 below). The student started explaining how the image reminded him of the poem “I Think Mice are Rather Nice” by Rose Fyleman. This was something that could not be planned for and provided the students a way to connect with the image personally as well as in an artistic and literary manner. At other times the students seemed distracted and interest faded a little, so the questions were kept at a minimum. An example can be found with question 8 in the artistic personal question category. These students did not seem very excited to discuss their experiences with plastercine and combined with decreased student energy, resulted in a brief discussion with this topic.

While participating in the discussion, students are encouraged to interact with the image and use new and existing verbal language to communicate their ideas with the teacher and other students. By interpreting visual cues and using ideas directly found in the illustration to back up claims, students practice rich communication by interpreting the objects in the picture as they relate to one another. As previously mentioned in chapter 2, when relational words are considered in their semantic context, meaning emerges as the imagery unfolds Bugelski (1968).

Students also practice listening and considering the views and ideas of others. Students use observational skills by noticing visual signifiers and discuss the importance of them, such as the size of the cat in the window, the letters on the wall, and the paper hanging from the ceiling. Basic symbols are decoded and discussed, helping students

understand the location and all of the possible activities of the rats in the illustration. Students review, interpret, analyze and sort details throughout the discussion. According to Gear (2006), a good reader is able to sort through information in the text, select key ideas, and remember them. Questions that encourage deeper thinking, paying attention to details, and determining their importance helps students practice this strategy visually before applying it to text when reading later on.

Discussion that moves from narrative responses to deeper analytical responses is encouraged as the discussion progresses. Different interpretations of the illustrations are discussed and the ambiguity of art and the variety of meaning is discovered. As Sinatra (1986) says, if a viewer assumes a deeper meaning in the image, then more complex thinking will take place. Deeper meanings are assumed and encouraged to be contemplated as the teacher moves through the questions and probes thinking beyond an initial response through follow-up questions in each section. Visual literacy and reading comprehension both require critical-thinking, describing, analysing, interpreting, and making judgments and thoughtful responses.



Fig. 25

Question 1: What is happening in this picture?

Bobby: They are having a birthday party!

Follow-up: How do you know?

Bobby: Because they have cake and presents and balloons!

Follow-up: What else can you find that tells you what is happening?

Fred: There are streamers on the ceiling.

Greg: Hey, the balloons aren't real balloons. They're pictures!

Sarah: And the rats are excited about the party! See, he's smiling!

Follow-up: Who is having the birthday party?

Fred: It's his party (pointing to the rat in the chair). He's happy and smiling.

Greg: Yeah. His name is Freddy Party Boy! Ha Ha!

Fred: No, it's Peter the Party Pal!

Greg: No, it's Crazy Cake Cruncher!

Since this would be the third illustration in the discussion series, all students would now be familiar with the question and answer process. This key question is easy to answer and does not require a deep analysis. However, it should be noted that since visual literacy is culturally specific, some students may not recognize all aspects of a typical North American birthday party. In addition, this part of the discussion could last longer than the example, allowing the students to describe more aspects of the image.

The follow-up questions encourage students to continue examining the illustration, discouraging a brief glance at the illustration and a dismissive attitude and encouraging students to sort through the visual information and select key ideas in the illustrations. According to Gear (2006), determining importance is also an important aspect in becoming a good reader.

This initial set of questions relies on concrete observations and builds confidence so that students are more open to attempt to interpret increasingly abstract symbols later in the discussion. Fred believes that the party is for the smiling rat sitting in the chair because of the rat's facial expression. The student quickly interprets the rat's smile as a happy smile and attributes it to the party. He synthesises information and uses the opportunity to use language to communicate his ideas. Greg's reaction shows another way of synthesizing information and provides an example of the "play with language" component of language use as outlined by Jalongo (2001).

Question 2: How did the artist make this picture?

Dan: The artist put lots of stuff together. Like popcorn on the floor, stuck a cake in there and made some rats.

Sylvie: Yeah. And then it looks like he took a picture of it.

Follow-up: Why did the artist use so many different things in the picture?

Deb: It's a party. You always need lots of presents and decorations for a party.

Jan: There's lots of stuff because rats like lots of stuff. You know that rat in Charlotte's Web? He liked collecting things and had a lot of stuff in his house.

Follow-up: What makes you say that?

Jan: You know that rat in Charlotte's Web? He liked collecting things and had a lot of stuff in his house.

These are problem-solving questions and, while responses continue to rely on concrete observations, slightly deeper thinking is needed to answer the questions. These questions continue to encourage communication, oral language practice, listening and considering other's views and ideas. Jan makes connections to *Charlotte's Web* and uses ideas found directly in the illustration to back up her claims. Students also build comprehension, including critical-thinking skills, describing, analysing, interpreting, and making judgments and expressing thoughtful responses to the illustration. Students practice hypothesizing and filling in information based on evidence that they can directly observe. A good reader is one that can draw inferences based on evidence in the text (Gear, 2006). These are all necessary in developing a solid base for literacy.

Question 3: What does this image remind you of?

Sue: Playing musical chairs and pin the tail!

John: It remind me of the poem "I Think Mice are Nice" that we did at school.

Follow-up: What makes you say that?

Sue: They're my favourite games that I play at my birthday parties. And look, there's a kitty picture on the wall. Maybe they can play pin the tail on the kitty!

John: It reminds me of the poem because the mice are nice. They are having fun and being naughty.

Follow-up: What do you mean by that?

John: There is popcorn on the floor and they're sitting on the cake! It's like in the poem when they say "they nibble things they shouldn't touch". They're eating cake and popcorn that they shouldn't touch!

Follow-up: What poem is that?

John: It's a poem that we learned last year. It's about mice and what they do and how mice are nice.

Follow-up: What else can you find?

John: There are streamers on the ceiling. Maybe there is a piñata on the ceiling as well, but we just can't see it yet. I think it's a piñata of a cat, or maybe a giant piece of cheese!

Dan: Maybe they already opened it and that's why there is popcorn all over the floor and stuff everywhere!

This is a set of imaginative questions that help to make the discussion more interesting and motivate students to examine the illustration and participate in the discussion. All answers are correct. Students are encouraged to think more deeply about the image, continue to practice communicating with each other and combine what they see with their imaginations. This can be seen by John's hypothesis that a piñata is on the ceiling just out of view, and Sue's idea of playing pin the tail on the kitty with the picture hanging on the wall. This is important because it shows the students progressing from determining meaning from the literal representation of the picture to determining meaning from the organization of the image. As previously mentioned in chapter 1, certain arrangements and viewpoints, combined with what is and what is not shown, encourage viewers to infer certain content. Practicing how to make inferences based on provided information, such as the possibility of a piñata on the ceiling, is important because it overlaps with the ways readers can become proficient, as outlined by Gear (2006).

In this example John points out parallels between the image and the nursery rhyme *Mice are Nice* in that both depict similar behaviors of mice. This is similar to synesthesia, or in other words, the ability to provide meaning in different modes of communication (Kalantzis and Cope, 2012). Not only is John making connections between a visual language and a written language, but he is also making personal connections to concepts that he learned in a previous class. According to Gear (2006) "a good reader is able to draw from background knowledge and personal experiences while reading to help create meaning for the text" and is also able to "draw inferences based on evidence in the text" (p. 9). John is practicing both of these important reading strategies as he creates a visual understanding of the illustration.

Question 4: Do you have mice or rats in your house?

Sue: No way! That would be gross!

Follow-up: What makes you say that?

Sue: My mom would never let a mouse or rat into our house!

John: Maybe they're hiding!

Sue: No way! I would know and I know for sure we don't have any in our house! But I did see a rat at Granville Island once. It was huge and had a long tail. We saw it run into a garbage can and grab a piece of bread and old popcorn. Maybe it was going to have a party, too!

These questions directly link concrete observations from the illustration to student experiences. Again, all answers are assumed to be correct and continue to motivate students to look at the illustration and participate in the discussion. As previously mentioned, linking the discussion to student experiences creates interest and help students understand the visual symbols they are decoding. Learning will become authentic and relevant as students practice making connections. In this case Sue makes connections with her experiences at home. Telling the story about seeing a rat at Granville Island makes the illustration more meaningful and will most likely help her remember the details in the image.

Question 5: What textures do you see?

Jill: The rats look furry and the door is made of wood.

Follow-up: What makes you say that?

Jill: The rats have little lines on them that make it look like fur. And the door is brown like wood.

Follow-up: What else can you find?

Sue: It looks like wood but it also looks smooth. It must be polished wood.

John: And the cake looks sweet!

Sue: Sweet is not a texture!

John: So? It still looks good!

In this set of questions students begin to examine details by gathering information about the textures they see. Students describe and compare the textures by pointing out examples from the illustration. Specific vocabulary is learned and practiced, as seen by the use of the words furry, wooden, polished, and sweet, further aiding language and communication practice. At the same time students also discover how the basics of visual art work and how texture is used in an image. Details are examined and interpreted, encouraging students to practice decoding, make judgements and provide thoughtful answers.

Question 6: What media did the artist use to create the rats / the picture?

Dave: They're made from platercine or clay or something like that.

Follow-up: What makes you say that?

Dave: They are made in 3D. They're not flat. This makes them look real. And they just look like the platercine we used in art class. At least the closer ones look like platercine. I can't tell with the back ones.

Follow-up: What else can you see? What other materials are used?

Jack: Hey, look! The steamers are paper. They look like ripped tissue paper.

Follow-up: How do you know they are ripped?

Jack: The edges aren't straight like they would be with scissors.

John: Yeah, and that cake is made from whipping cream. It looks fluffy.

Jill: And there are presents!

Sarah: I see paper and popcorn. The decorations are paper.

Follow-up: Why are there so many materials?

Sarah: To make the picture interesting.

Jill: It's not to make the picture interesting. It's because that's what rats do. They use lots of different things and put them together.

Jack: And how else would they get decorations? The rats take them and chew on them. That's why stuff is ripped!

At this point the discussion moves from narrative responses to deeper analytical responses. Different interpretations of the illustration are discussed and the ambiguity of art and the variety of meaning can be discovered. As Sinatra (1986) says, if a viewer assumes a deeper meaning in the image, then more complex thinking will take place. The questions encourage students to look further into the image, looking for clues as to why the image contains so many materials. In addition, students practice hypothesizing and filling in information based on evidence in the illustration which is an important exercise for literacy development.

Question 7: What other materials could the artist have used to make the rats?

Jill: Maybe clay.
Alex: Or playdoh.

Follow-up: What makes you say that?

Jill: Because you can use those to make round things.
Sarah: You mean you can *model* with it.
Jill: Yeah, like make things rather than paint flat things.

Follow-up: Why do you think the artist chose to use plastercine?

Alex: Because it's fun.
Sarah: Because that's how to make 3D things and make them realistic. You could make a rat from cardboard but it probably wouldn't look as good or as real.

This section provides students an opportunity to use their imagination and practice some problem solving again with textural issues. Students are encouraged to think about different techniques and perspectives, and reflect why the artist chose to create the image in this particular way with these particular materials. Students can also visualize what the image would look like if other materials were used to create the rats and decide what would be the most suitable. All of these actions occur while students practice new vocabulary, language usage and communication.

Question 8: Have you ever made pictures using plastercine?

Jamie: I've played with plastercine but haven't made pictures like this.
Kelly: Me neither. I'm not allowed to use a camera.

Follow-up: What makes you say that?

Kelly: You need to take a picture of the plastercine when you're done. I'm not allowed to use the camera anymore because last time I dropped it in a sink of water and broke it.

This question helps students make personal connections to the illustration as well as techniques used in the illustration, making the image more memorable and increasing motivation to participate in the discussion.

Question 9: Where is the party taking place?

Sue: In the rat's house.

Follow-up: Is it a large or a small space? How can you tell?

Dave: It's a big place. Look at how much stuff is in it!

Jill: Yeah, but look at the cat in the window. He's huge! So the room must be small!

Follow-up: What else can you see that shows the size of the room?

John: The cake is too big in the room.

Sarah: Everything else is small – it's rat-size. The chair, the presents, and the hat on the rat – they are all small like the rats.

These questions link the image to setting, an important story element. Anderson (2002) and Raines and Isbell (1994) found that many emergent readers do not focus on the subtle aspects of illustrations that are important in understanding and appreciating the story. It is interesting to note Jill's comment on the size of the cat, deducing that the room must be small. She does not question the sizes that are portrayed, as expected by Gombrich's account that images cannot be false, as outlined in chapter 2. Continuing to review the illustration helps students discover the importance of details and their relevance to the story, not just to the image. These details are then explored and interpreted in terms of the setting.

Question 10: How did they get the cake into the rat house?

Ray: "I don't know. That's tricky. Maybe they squeezed it through the door."

Follow-up: Who brought the cake into the rat house?

Ray: "It's that rat over there in the chair."

Follow-up: What makes you say that?

Ray: "I know because he is smiling at me. He thinks the cake is funny."

Simon: "No, he thinks it's funny because we don't know how he got the cake inside!"

Follow-up: What else can you find that tells you how they got the cake inside?

Simon: "There is icing by the door. They must have squeezed it through the door."

Kate: "No way. The cake would be squished to pieces if they did that. The door is too small."

Madison: "Maybe there is a really big back door that you can't see."

Nathan: "Or maybe a garage door that opens up. He drove the cake into the house!"

Kate: "If he used a back door then why is there icing on that little door over there?"

Nathan: "Maybe he tried that door first, then when it didn't work he went around to the other door."

Ray: "Maybe he smeared it on the door when he tasted the cake and licked his fingers."

Vicky: "Maybe it was that rat over there. He looks like a magician so maybe he did a magic trick with the cake."

This part of the discussion encourages problem solving with respect to the setting as the characters are re-examined. Students make eye contact with the mouse that stole the cake. Is he laughing and asking how he got the cake into the hole? Or is he laughing and having fun at the party? Appearance, wear, height, visual features, actions, and movements all provide information about characters and even help viewers bond with certain characters. Using context cues to derive meaning occurs in the language of art, just as in verbal language. As previously mentioned in chapter 2, Wittgenstein refers to words having meaning only in a sentence; the meaning of each word is derived from being within a context of other words. Similarly, the physical

groupings of characters show relationships and provide information about the story. The context is important. One rat is looking at the reader, is smiling, and is slightly larger than the other rats. This tells the reader that this could be the mischievous rat that planned the party and snuck the cake into the house. In this case, viewers bond with the rat that is looking at the audience, thus encouraging them to believe that this is the mouse that brought the cake into the mouse hole.

Validity is also investigated. Are the image, the positioning, the props and the body language consistent with how the viewer understands the scene? Is it possible to get the whole cake through a tiny hole? What do these elements tell the viewer? According to Bader, examining symbols and nuances such as these in relation to literary elements helps to teach the reader about narrative conventions and develops their literary competence. Children react to these notions, interact with the images, and interpret complex picture books.

Question 10 cont.

Follow-up: What makes you say that, Vicky?

Vicky: "Look at how he is dressed. He has a hat and there's a wand like magicians use."

William: "Yeah, but maybe he's there to do magic tricks for the party like at my party last year. And look at the wand – it's broken!"

Ray: "A broken wand wouldn't work!"

Vicky: "Maybe he'll get a new one in the presents!"

As students examine the illustration and use details in the image to support their ideas as to how the cake was brought into the party, they are practicing how to hypothesize and fill in information based on evidence. According to Gear (2006), a good reader is one that asks questions, can draw inferences based on evidence in the text, is able to sort through information and determine importance, is able to visualize, and draw from personal experience and background knowledge to help create meaning. These are all practiced as students refine their visual literacy skills. In this discussion, students

question the validity of the image, draw inferences about how the cake was brought to the party based on evidence they can see in the illustration, they visualize what the rest of the room looks like with a large door on the other side, and draw from personal experiences such as William having a magician at his own birthday party. In addition, linking the discussion to student experiences helps to create interest and helps students understand the visual symbols they are decoding. Learning becomes authentic and relevant. Practicing and developing the habits of a good reader with visual literacy before moving on to more difficult and abstract text can only result in building a stronger literacy foundation.

Question 11: Do rats really have birthday parties?

Kelly: No, that's silly!

Follow-up: What makes you say that?

Kelly: Rats are animals. They don't have birthday parties!

Sarah: You could have a party for a pet rat though!

Follow-up: If you had a pet rat, what kind of party would you plan for him?

Sarah: It would be like this one! With cake, presents and games! But I would invite my friends instead of rats!

Fun and imaginative questions such as these motivate students to continue to participate in the discussion and provide a small break from scrutinizing the illustration. Creative plot outlines are explored, providing students with ideas for potential stories and prepare students with ways to bring the three illustrations together later on. Students continue to use their imaginations and visualize potential parties. Verbal skills, vocabulary, communication and confidence are improved.

Question 12: Where is your favourite place to have a birthday party?

John: My favourite place is the rec center.

Jane: I like having my parties at home!

Follow-up: What makes you say that?

John: The rec center is big. I had a soccer party there once and we played two soccer games and had cake and everything!

Jane: I like having my birthday parties at home because then I can have all my friends in my room at the same time! It's so fun!

The final set of questions links the illustration to personal experiences again. They are simple questions, encouraging students to maintain an extended focus and complete the discussion on a positive note.

This was an example of one of the five discussions that could take place based on three illustrations in the book. The next discussion brings the three illustrations together and focuses on the similarities and differences between the illustrations and the artistic and literary elements already introduced. The final session allows students to create their own illustrations, as shown in the following example where a student applies artistic and literary elements to encode and communicate information for others to interpret, completing a comprehensive discussion and application of visual literacy.



Fig. 26

Figure 26 is an example of an illustration created by a 6-year-old showing her interpretation of what would happen next after viewing the series of illustrations. While drawing, Teagan encodes her thoughts into images and communicates her ideas using symbolism and irony. The mouse and the cat smile while they play a game, symbolizing a growing friendship. Upon closer examination, the viewer finds that the board game played is Mousetrap. Teagan explains that this is funny, because maybe the cat is just tricking the mouse into thinking they are friends and the cat really want to catch the mouse, like in the game. This idea is emphasized by both of the cats looking directly at the viewer whereas the mouse looks at the cat. Elements and principles of art are used as a language to communicate ideas. Teagan explains that the colors are “bright and happy, like a birthday party”. There is a strong use of line that helps “to make the picture look like everyone is moving and having fun”. The perspective was also specifically

chosen so that the viewer can be a part of the party. Teagan also makes personal connections to the image as she illustrates the presents and cake and talks about her own birthday parties and visualizes her own upcoming birthday. Elements of a story structure continue as she threads meaning through all of the images discussed throughout the entire process, tying them together with her own image through an appropriate setting, theme and set of characters. Throughout the exercise she has many opportunities to apply and practice knowledge that will be needed while working with print literacy at a later date.

Conclusions

While practicing visual literacy, young students are given the opportunity to practice determining meaning from images based on viewing experiences. Using picture books to expand visual literacy helps young students practice and expand pre-literacy requirements. While participating in the visual literacy process, students sharpen their verbal skills, develop supported interpretations of the illustrations, develop critical thinking skills, and identify important details. Students also learn about the structure of stories including characters, plot, settings and themes, comprehend the illustrations, encode and decode symbols, and experience complete picture books. The discussion questions are designed to encourage children to examine the artwork and come to their own conclusions with supported evidence from the artwork. Moreover, moving through the four questioning categories encourages students to think about ideas from different perspectives. All questions are designed to encourage students to work at their own level, created directly from ways that young students naturally respond and make sense of artwork. The result is a complete interactive experience maximizing practice with visual literacy.

In this paper I have shown the ways that print and visual literacy overlap by drawing upon current research and theories in multiple fields as well as my own experiences teaching elementary students. As Wittgenstein explained in his discussion about family resemblances, things do not need to be related by a single common factor; instead they may be related by several overlapping features. The overlapping features between print and visual literacy include language and communication practice,

decoding and encoding, comprehension, motivation, aesthetic and story structure understandings and experience with literacy.

These experiences help students interpret the artwork and the printed words in the corresponding picture book as well as motivate students and practice the processes necessary to read and understand printed text in other books. Moreover, picture books serve as an appropriate vehicle for discussing visual art as they are easily accessible and provide many different types of visual artwork for discussion. Many teachers and students are comfortable with them because of familiarity with these books.

This paper has served as a critical, exploratory study that questions the interrelationships among language, visual, verbal and print literacy. Concepts and processes involved in visual and print literacy have been explored, highlighting connections and similarities that exist among these different ways of communicating, including language and communicating concrete and abstract ideas with words and images that can also be concrete and abstract in nature. When examining artwork in picture books, students use elements such as line, shape and color to interpret actions, recognize objects, and understand the layers of meaning, symbols and metaphor, allowing stories to emerge. Emotions are embedded along with information in the form of print and images, triggering a full range of expression. An early introduction to visual literacy can form a strong basis that will most likely serve readers well in the future, providing students with the confidence to tackle future literacy activities.

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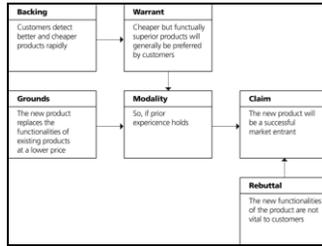
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Appendices

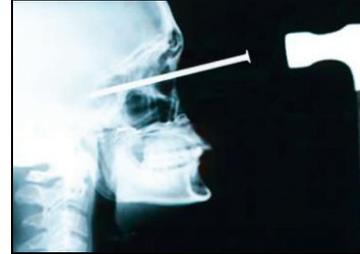
Appendix A. Types of Visualizations



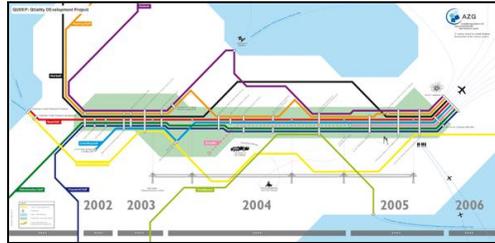
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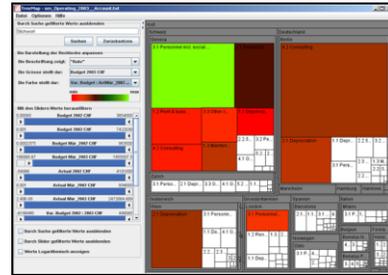
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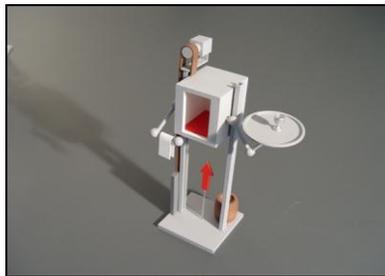
Image



Map



Interactive Visualization



Object



Story

Appendix B.
Stages of Drawing – Viktor Lowenfeld and Herbert Read

Viktor Lowenfeld (1978)

First Stage of Self Expression	(Scribbling Stage)	2 - 4 years
First Representational Attempts	(Pre-schematic Stage)	4 - 7 years
Achievement of a Form Concept	(Schematic Stage)	7 - 9 years
Dawning Realism	(Gang Age)	9 - 11 years
Pseudo-naturalistic	(Stage of Reasoning)	11 -13 years

Herbert Read (1966)

Scribble	2 - 4 years
Line	4 years
Descriptive Symbolism	5 - 6 years
Descriptive Realism	7 - 8 years
Visual Realism	9 - 10 years
Repression	11 - 14 years
Artistic Revival	14 years

**Appendix C.
Twenty Scribbles**

Scribble 1		Dot
Scribble 2		Single vertical line
Scribble 3		Single horizontal line
Scribble 4		Single diagonal line
Scribble 5		Single curved line
Scribble 6		Multiple vertical line
Scribble 7		Multiple horizontal line
Scribble 8		Multiple diagonal line
Scribble 9		Multiple curved line
Scribble 10		Roving open line
Scribble 11		Roving enclosing line
Scribble 12		Zigzag or waving line
Scribble 13		Single loop line
Scribble 14		Multiple loop line
Scribble 15		Spiral line
Scribble 16		Multiple-line overlaid circle
Scribble 17		Multiple-line circumference circle
Scribble 18		Circular line spread out
Scribble 19		Single crossed circle
Scribble 20		Imperfect circle

Appendix D.
Bloom's Taxonomy – Cognitive Domain

Students move from the simplest behavior to the most complex. It is assumed that students master each category as move through the domains listed below.

Bloom's Taxonomy
1. Knowledge: Students recall, describe, outline, recognize information.
2. Comprehension: Students comprehend, covert, extend, interpret, infers information.
3. Application: Students apply, change, modify, construct, use, prepare information.
4. Analysis: Students compare, contrast, diagram, identify, differentiate information.
5. Synthesis: Students compile, compose, plan, revise, summarize, modify information.
6. Evaluation: Students make judgments, critiques, criticizes, appraises information.

Appendix E. **Housen's Aesthetic Stages**

Stage 1 – *Accountive*

Accountive viewers are storytellers. Using their senses, memories, and personal associations, they make concrete observations about a work of art that are woven into a narrative. Here, judgments are based on what is known and what is liked. Emotions color viewers' comments, as they seem to enter the work of art and become part of its unfolding narrative.

Stage 2 – *Constructive*

Constructive viewers set about building a framework for looking at works of art, using the most logical and accessible tools: their own perceptions, their knowledge of the natural world, and the values of their social, moral and conventional world. If the work does not look the way it is supposed to, if craft, skill, technique, hard work, utility, and function are not evident, or if the subject seems inappropriate, then these viewers judge the work to be weird, lacking, or of no value. Their sense of what is realistic is the standard often applied to determine value. As emotions begin to go underground, these viewers begin to distance themselves from the work of art.

Stage 3 – *Classifying*

Classifying viewers adopt the analytical and critical stance of the art historian. They want to identify the work as to place, school, style, time and provenance. They decode the work using their library of facts and figures which they are ready and eager to expand. This viewer believes that properly categorized, the work of art's meaning and message can be explained and rationalized.

Stage 4 – *Interpretive*

Interpretive viewers seek a personal encounter with a work of art. Exploring the work, letting its meaning slowly unfold, they appreciate subtleties of line and shape and color. Now critical skills are put in the service of feelings and intuitions as these viewers let underlying meanings of the work what it symbolizes emerge. Each new encounter with a work of art presents a chance for new comparisons, insights, and experiences. Knowing

that the work of art's identity and value are subject to reinterpretation, these viewers see their own processes subject to chance and change.

Stage 5 – *Re-Creative*

Re-creative viewers, having a long history of viewing and reflecting about works of art, now willingly suspend disbelief. A familiar painting is like an old friend who is known intimately, yet full of surprise, deserving attention on a daily level but also existing on an elevated plane. As in all important friendships, time is a key ingredient, allowing Stage 5 viewers to know the ecology of a work — its time, its history, its questions, its travels, its intricacies. Drawing on their own history with one work in particular, and with viewing in general, these viewers combine personal contemplation with views that broadly encompass universal concerns. Here, memory infuses the landscape of the painting, intricately combining the personal and the universal.

Appendix F.
Planning Worksheet A – Choosing Themes

Title of Book:

Author:

Illustrator:

Publisher:

ISBN #:

Brief overview:

Artistic Themes: (the elements and principles of art) Color, value, texture, form, line, shape, space, emphasis, balance, harmony, variety, movement, rhythm, proportion, unity, etc.

Literary Themes: Plot, characters, setting, theme, conflict, point of view, etc.

Planning Overview

Day 1

Illustration #1:

Page #:

Artistic Theme:

Literary Theme:

Day 2

Illustration #2:

Page #:

Artistic Theme:

Literary Theme:

Day 3

Illustration #3:

Page #:

Artistic Theme:

Literary Theme:

Day 4

Artistic Discussion: Media comparison and meaning

Literary Discussion: Combining literary themes to create a story

Day 5

Read story in picture book

Compare to own stories

Blank Discussion Plan

Day 1

Illustration #1: Brief description of illustration, as on page 1

Page #:

Artistic Theme #1: Chosen topic as on page 1

Literary Theme #1: Chosen topic as on page 1

Concrete Questions

Informative Concrete Key Question: Where are you, the viewer, in this picture?

What makes you say that?

What else can you find?

Heuristic Concrete Key Question: Solving basic (potential) problems about concrete objects in the illustration

What makes you say that?

What else can you find?

Imaginative Concrete Key Question: Using the items in the picture as a springboard for the imagination

What makes you say that?

What else can you find?

Personal Concrete Key Question: Tie items they see to students' own experiences

What makes you say that?

What else can you find?

Artistic Questions

Informative Artistic Key Question: What colors do you see?

What makes you say that?

What else can you find?

Heuristic Artistic Key Question: Solving basic (potential) problems about artistic theme #1

What makes you say that?

What else can you find?

Imaginative Artistic Key Question: Questions based on artistic theme #1 to spark the imagination

What makes you say that?

What else can you find?

Personal Artistic Key Question: Tie artistic theme #1 to students' own experiences

What makes you say that?

What else can you find?

Literary Questions

Informative Literary Key Question: Whose perspective is this / who is telling this story?

What makes you say that?
What else can you find?

Heuristic Literary Key Question: Solving basic (potential) problems about literary theme #1

What makes you say that?
What else can you find?

Imaginative Literary Key Question: Questions concerning literary theme #1 to spark the imagination

What makes you say that?
What else can you find?

Personal Literary Key Question: Tie literary theme #1 to students' own experiences

What makes you say that?
What else can you find?

Day 2

Illustration #2: Brief description of illustration, as on page 1

Page #:

Artistic Theme #2: Chosen topic as on page 1

Literary Theme #2: Chosen topic as on page 1

Concrete Questions

Informative Concrete Key Question: Where are you, the viewer, in this picture?

What makes you say that?

What else can you find?

Heuristic Concrete Key Question: Solving basic (potential) problems about concrete objects in the illustration

What makes you say that?

What else can you find?

Imaginative Concrete Key Question: Using the items in the picture as a springboard for the imagination

What makes you say that?

What else can you find?

Personal Concrete Key Question: Tie items they see to students' own experiences

What makes you say that?

What else can you find?

Artistic Questions

Informative Artistic Key Question: What colors do you see?

What makes you say that?

What else can you find?

Heuristic Artistic Key Question: Solving basic (potential) problems about artistic theme #2

What makes you say that?

What else can you find?

Imaginative Artistic Key Question: Questions based on artistic theme #2 to spark the imagination

What makes you say that?

What else can you find?

Personal Artistic Key Question: Tie artistic theme #2 to students' own experiences

What makes you say that?

What else can you find?

Literary Questions

Informative Literary Key Question: Whose perspective is this / who is telling this story?

What makes you say that?

What else can you find?

Heuristic Literary Key Question: Solving basic (potential) problems about literary theme #2

What makes you say that?

What else can you find?

Imaginative Literary Key Question: Questions concerning literary theme #2 to spark the imagination

What makes you say that?

What else can you find?

Personal Literary Key Question: Tie literary theme #2 to students' own experiences

What makes you say that?

What else can you find?

Day 3

Illustration #3: Brief description of illustration, as on page 1
Page #:
Artistic Theme #3: Chosen topic as on page 1
Literary Theme #3: Chosen topic as on page 1

Concrete Questions

Informative Concrete Key Question: Where are you, the viewer, in this picture?

What makes you say that?

What else can you find?

Heuristic Concrete Key Question: Solving basic (potential) problems about concrete objects in the illustration

What makes you say that?

What else can you find?

Imaginative Concrete Key Question: Using the items in the picture as a springboard for the imagination

What makes you say that?

What else can you find?

Personal Concrete Key Question: Tie items they see to students' own experiences

What makes you say that?

What else can you find?

Artistic Questions

Informative Artistic Key Question: What colors do you see?

What makes you say that?

What else can you find?

Heuristic Artistic Key Question: Solving basic (potential) problems about artistic theme #3

What makes you say that?

What else can you find?

Imaginative Artistic Key Question: Questions based on artistic theme #3 to spark the imagination

What makes you say that?

What else can you find?

Personal Artistic Key Question: Tie artistic theme #3 to students' own experiences

What makes you say that?

What else can you find?

Literary Questions

Informative Literary Key Question: **Whose perspective is this / who is telling this story?**

What makes you say that?
What else can you find?

Heuristic Literary Key Question: **Solving basic (potential) problems about literary theme #3**

What makes you say that?
What else can you find?

Imaginative Literary Key Question: **Questions concerning literary theme #3 to spark the imagination**

What makes you say that?
What else can you find?

Personal Literary Key Question: **Tie literary theme #3 to students' own experiences**

What makes you say that?
What else can you find?

Day 4

Artistic Discussion: **Choose 2-3 questions designed to bring the three artistic themes together**

Literary Discussion: **Choose 2-3 questions designed to bring the three literary themes together**

Note – these questions do not need to be exclusive of one another. The ways the artistic and literary influence each other can and should be encouraged. The depth of analysis depends on the level of the students.

Students create their own stories based on the three illustrations.

Day 5

Read story in picture book

Compare to own stories

Appendix G.

Story Outline

Pages 1

Blank / Pasted into cover and not seen

Pages 2 – 3

Endpapers

Pages 4 - 5

Copyright, Title page

Pages 6 -7

Brother and sister are in the living room playing a board game. The reader can barely peek through the open door to the kitchen, catching a glimpse of mother finishing what looks like a birthday cake.

Perspective: 3rd person

Media: Colored pencil

Pages 8 - 9

Sister continues playing in the living room while mother goes outside to garden. Brother is missing from the scene.

Perspective: 3rd person

Media: Colored pencil

Pages 10 - 11

Sister enters the kitchen and notices the cake missing. Only a few drops of icing remain on the plate. Other details that she possible does not see include a small icing foot print on the side of the counter, a tail hanging off of the top of the fridge, crumbs on the floor, ripped paper on the floor, water spilled on the floor by the fridge.

Perspective: Sister's point of view

Media: Watercolors

Pages 12 - 13

Brother is in the kitchen and sister leaves (can see her foot at the door as she step out). Brother notices the cake missing. More small details can be seen that were not visible in the previous picture such as mail that was chewed, part of a pin-the-tail game, pieces of cheese on the table, etc.

Perspective: Brother's point of view

Media: Acrylic painting

Pages 14 -15

Sister and brother fight in the living room, each blaming the other for eating the cake. Mother is still outside. Details include a torn party magazine, a piece of toilet paper on the stairs, tissue paper in the corner, cat sleeping on the sofa.

Perspective: 3rd person

Media: Colored pencil

Pages 16- 17

Mother comes in from outside, discovers the missing cake and confronts the children. Balloons float up from behind the couch but nobody notices. The cat wakes up.

Perspective: 3rd person

Media: Colored pencil

Pages 18 - 19

Viewer sees the living room from the cat's perspective. Cat is on the couch as in the previous page. Couch pillow is close, floor is close, children fighting farther away. Details include crumbs, footprint, icing on floor, deflated balloon peeking out from rug corner.

Perspective: Cat's perspective

Media: Charcoal

Pages 20 - 21

Cat is by his food dishes. Close-up of the dishes, with a blob of icing behind the dish and a small footprint.

Perspective: Cat's perspective

Media: Charcoal

Pages 22 - 23

Cat is on the floor sniffing a piece of cheese. The cheese is very close-up so it appears large in the illustration.

Perspective: Cat's perspective

Media: Charcoal

Pages 24 – 25

Another image from the cat's perspective, this time the cat has moved behind the couch and is on the floor. Viewer can see the back of the couch and bits (dust, a piece of cheese, etc) on the floor. A mouse hole can be seen in the wall. It is small and fairly far away, so the viewer needs to look carefully to see what it is.

Perspective: Cat's perspective

Media: Charcoal

Pages 26 – 27

Outside the rat's house, we can catch a glimpse of the party inside. The colors inside the window contrast with the darkness behind the sofa. Detail is minimal.

Perspective: Rat's perspective

Media: Multimedia (plastercine, paper, collage, acrylic, photography)

Pages 28 – 29

The party scene. The rats are having a party as the cat looks through the window. The cake is in the middle of the room and rats are eating it and walking on it. A rat magician entertains the guests. Details include presents, torn paper, a torn paper "Happy Birthday" sign, toilet paper streamers, popcorn, pack-rat garbage on the floor. The walls are yellow and have cheese themed wallpaper. A game of pin the tail on the cat hangs on the wall. The mystery of the missing cake is solved.

Perspective: Rat's perspective

Media: Multimedia (plastercine, paper, collage, acrylic, photography)

Pages 30 – 31

Endpages

Page 32

Blank / Pasted into cover and not seen

Character Perspective

Media

3rd person

Pencil crayon

Sister

Watercolor

Brother

Acrylic paint

Cat

Charcoal

Rat

Multimedia

Appendix H.
Planning Worksheet A: Step 2 – Brainstorming Questions

Day 1

Illustration #1:	A young girl is in the kitchen and discovers the missing cake.
Page #:	n/a
Artistic Theme:	Color
Literary Theme:	Plot

Concrete Questions

Informative Concrete Key Questions/Ideas:

(Goal is to focus the students onto the illustration and gather basic information)

Where is the girl?

What is she doing?

What objects do you see?

Heuristic Concrete Key Questions/Ideas:

(Solving basic problems using items in the illustration)

What is going to happen if she steps to the right?

What is on top of the fridge?

Imaginative Concrete Key Questions/Ideas:

(Using the items in the picture as a springboard for the imagination)

What do you think is inside the fridge?

What is inside the cupboards?

Why did the mother bake the cake?

Personal Concrete Key Questions/Ideas:

(Tie items they see to students' own experiences)

Do you have pictures hanging on your fridge?

Does your kitchen look like this one?

Artistic Questions

Informative Artistic Key Questions/Ideas:

(Gathering information about colors)

What colors do you see?

Describe the colors (bright, soft, muted, tinted, shaded, light,...)

Are the colors realistic?

Heuristic Artistic Key Questions/Ideas:

(Solving basic problems about color)

What kind of media can make colors like this?

What if we wanted the colors to be brighter?

How would brighter/duller colors change the picture?

Imaginative Artistic Key Questions/Ideas:

(Questions based on color usage to spark the imagination)

What if only one color was used in this picture?

How would the picture change?

Would it still be realistic?

Personal Artistic Key Questions/Ideas:

(Tie colors that are used to students' own experiences)

Have you ever used watercolor paints?

Have you used watercolor paints on dry/wet paper?

What kind of media would you use if you were creating this picture?

Literary Questions

Informative Literary Key Questions/Ideas:

(Gathering information about potential plot)

What is happening in the picture?

Where is the girl going?

What is the girl going to do?

Heuristic Literary Key Questions/Ideas:

(Solving basic problems about plot)

What is going to happen next?

What is the girl going to do next?

What is her mother going to do?

Imaginative Literary Key Questions/Ideas:

(Questions concerning plot to spark the imagination)

What would happen if she opens the fridge and finds an elephant?

What would happen if she finds the cake on the chair?

What if it is a magic cake?

Personal Literary Key Questions/Ideas:

(Tie plot ideas to students' own experiences)

Have you ever baked a cake?

Have you ever lost a cake?

Day 2

Illustration #2: The two children blame each other for the missing cake (cat's perspective).

Page #: n/a
Artistic Theme: Value
Literary Theme: Characters

Concrete Questions

Informative Concrete Key Questions/Ideas:

(Goal is to focus the students onto the illustration and gather basic information)

Where are you, the viewer, in this picture?

How do you know?

Heuristic Concrete Key Questions/Ideas:

(Solving basic problems using items in the illustration)

What is going to happen....?

Imaginative Concrete Key Questions/Ideas:

(Using the items in the picture as a springboard for the imagination)

What if you were color blind?

Imagine if you were color blind.

Personal Concrete Key Questions/Ideas:

(Tie items they see to students' own experiences)

Do you have a cat?

Do you have a pet?

Artistic Questions

Informative Artistic Key Questions/Ideas:

(Gathering information about value)

What colors do you see?

Heuristic Artistic Key Questions/Ideas:

(Solving basic problems about value)

Why do you think this picture is in black and white?

Imaginative Artistic Key Questions/Ideas:

(Questions based on value usage to spark the imagination)

Imagine if you were tiny like an ant. How would you see the world?

Personal Artistic Key Questions/Ideas:

(Tie value to students' own experiences)

Have you ever created a picture using only pencil?

Do you know anyone who is color blind?

Literary Questions

Informative Literary Key Questions/Ideas:

(Gathering information about potential characters)

Whose perspective is this / who is telling this story?

How do you know?

Heuristic Literary Key Questions/Ideas:

(Solving basic problems about characters)

Imaginative Literary Key Questions/Ideas:

(Questions concerning characters to spark the imagination)

Imagine you were a cat and you saw everything that happened in your house, but couldn't tell anyone about it.

What would you do?

Personal Literary Key Questions/Ideas:

(Tie character ideas to students' own experiences)

If your cat could talk, would he/she tell on you?

Day 3

Illustration #3:	The mice have a birthday party.
Page #:	n/a
Artistic Theme:	Texture
Literary Theme:	Setting

Concrete Questions

Informative Concrete Key Questions/Ideas:

(Goal is to focus the students onto the illustration and gather basic information)

What is happening?

What things do you see?

Heuristic Concrete Key Questions/Ideas:

(Solving basic problems using items in the illustration)

Why did the artist make this picture?

What is the purpose of the picture?

Why did the artist use so many things to make it?

Imaginative Concrete Key Questions/Ideas:

(Using the items in the picture as a springboard for the imagination)

What games will they play?

Who else should be invited to the party?

What does the picture remind you of?

Personal Concrete Key Questions/Ideas:

(Tie items they see to students' own experiences)

Do you have mice or rats in your house?

Have you ever seen a mouse?

Artistic Questions

Informative Artistic Key Questions/Ideas:

(Gathering information about texture)

What media did the illustrator use to create texture like this?

What textures do you see?

Heuristic Artistic Key Questions/Ideas:

(Solving basic problems about texture)

What media did the artist use to create the mice?

Imaginative Artistic Key Questions/Ideas:

(Questions based on texture usage to spark the imagination)

What other materials could the mice use to make streamers/balloons/etc?

Personal Artistic Key Questions/Ideas:

(Tie texture to students' own experiences)

Have you ever sculpted something with platercine?

Have you read any other books that use platercine in the pictures?

Literary Questions

Informative Literary Key Questions/Ideas:

(Gathering information about potential setting)

Where is the party taking place?

Is it a large or a small space?

How can you tell?

Heuristic Literary Key Questions/Ideas:

(Solving basic problems about setting)

How did they get the cake into the mouse house?

Imaginative Literary Key Questions/Ideas:

(Questions concerning setting to spark the imagination)

How did the mice get the cake into their house?

Do rats really have birthday parties?

How do you know?

Personal Literary Key Questions/Ideas:

(Tie setting ideas to students' own experiences)

Where do you have your birthday parties?

Where did your favorite birthday party take place?

Day 4

Artistic Discussion:

(Questions to bring the three artistic themes together)

What is the difference between color and value?

How does color, value and texture work together to create an interesting/effective illustration?

How did the author/illustrator use color, value and texture together to tell a story?

Literary Discussion:

(Questions to bring the three literary themes together)

What is more important in a story: plot, characters or setting?

How does the author/illustrator show whose perspective the story is taking place?

Day 5

Read story in picture book

Compare to own stories