This paper describes a questionnaire survey on Visual Literacy (VL) in archives. The study examined claims that VL should be an area of concern for archivists who are working increasingly with images as a result of the saturation of images in society. Research questions addressed included: Do archivists tend to have any previous training in VL related skills? Do archivists think that the skills identified by the VL index apply well to their work? How do archivists perceive their own VL? Results suggest that many archivists have little training in VL related skills, that the skills identified by the VL index tend to apply to their work, and that they view their own VL skills in a generally positive manner, but would support additional training.

Headings:

Archives

Archivists / training of

Archivists / United States

Visual literacy

Visual literacy / history
VISUAL LITERACY, IMAGES, AND THE ARCHIVIST

by
Natalie Moix

A Master’s Paper submitted to the faculty of the school of Information and Library Science of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master in Science in Library Science.

Chapel Hill, North Carolina
April 2011

Approved by

Christopher A. Lee
Visual Literacy in Archives

Visual information is becoming ubiquitous in our daily lives as technology evolves (Yeh, 2010). Increases in visual messages are occurring more often through a variety of avenues such as television, film, advertisements, blogs, digital photographs, video games, online videos, textbooks, reports, fliers, and books (Yeh, 2010). In “Visual Methodologies” Gillian Rose cites this saturation of visual images and uses the term “ocularcentrism” to describe the centrality that images currently have in modern society (2007). It is this prevalence of images these has caused many to question if society has the skills needed to properly communicate with and interpret images. These skills are increasingly referred to as Visual Literacy (VL). VL, simply put, is the ability to create, interpret, understand, and use visual information.

As images increasingly become the carriers of information in modern life, archives may find themselves significantly affected by images and a need for VL. As stewards of society’s documents and history, do archivists have the VL skills needed to properly interpret the flood of images that will make their way into archival care? Little research has been done to determine the state of VL in archives or related information institutions. It is the purpose of this exploratory research to provide more information on the current state of VL in archives by seeking to answer the following questions: Do archivists tend to have any previous training in VL related skills? Do archivists think that
the skills identified in the VL index developed by Avgerinou (2007) are appropriate to apply to their work? And finally, how do they perceive their own VL?

The goal of the study is to obtain information on issues related to VL in archives from working archivists in order to determine if further steps to measure VL in archives should be taken. By establishing groundwork in this area, this study aims to provide information needed to enable additional research on VL in information environments, offer recommendations for archives, and increase awareness of VL concerns. This information could prove valuable for information professionals, including archivists and librarians, researchers, teachers, administrators, and proponents of VL. The research acts to contribute to the broader understanding of visual literacy by expanding the field of inquiry. Archival and library practices could be influenced by the study’s findings and recommendations to explore the concept of VL further in areas such as description, arrangement and training.

**Visual Literacy**

The term “Visual Literacy” is one of several recent terms to fall under the general heading of information literacy skills, which includes digital literacy, global literacy, and media literacy. Disciplines identified by Avgerinou and Ericson (1997) as contributors to the field of VL include art, philosophy, linguistics, cognitive/gestalt psychology, visual perception, anatomy of the eye, mental imagery, neurophysiology, hemispheric processes, sociology, cultural anthropology, educational technology, instructional design, communications, and semiotics, among others.
VL is considered a set of acquired skills and not a naturally developed ability. Proponents of VL as a discipline cite the ubiquity of sophisticated images in our contemporary culture as cause for concern. Though one might assume that viewers who have grown up continuously exposed to images in the modern world would develop a natural literacy, VL scholars believe that the untrained consumption of images is currently passive instead of critical (Avgerinou, 2009). Viewers must be taught how to properly “read” visual images (Howells, 2003). In an effort to show that VL can indeed be taught, Yeh and Cheng (2010) conducted a study in which a sample of pre-teachers were tested for VL skills, received a fifty minute lesson on VL related skills in a technology course, and then retested. Their findings implied that the incorporation of VL principles in educational technology training for pre-service teachers has a positive effect on their overall VL. It is suggested that viewers need long-term educational support like that provided to new readers, despite the many differences between images and text (Yenawine, 1997).

Paul Messaris (1994) identifies four main areas of VL. 1. VL as a “prerequisite for the comprehension of visual media” refers to a familiarity with visual conventions acquired though repeated exposure to visual media. 2. “General cognitive consequences of VL” states that VL enhances not only visual comprehension, but also general cognitive abilities. 3. “Awareness of visual manipulation” makes viewers more aware of how meaning is created visually. 4. “Aesthetic appreciation” enhances evaluation and appreciation of artistic skill. Messaris suggests knowledge of these areas would advance critical viewing and have positive implications for viewers.
Defining Visual Literacy

A precise definition of VL has been consistently difficult to develop. John Debes first coined the term Visual Literacy in 1969. Though well aware of the difficulties associated with defining VL, he also reluctantly provided the following tentative definition as reported by Avgerinou & Ericson (1997):

Visual Literacy refers to a group of vision-competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences. The development of these competencies is fundamental to normal human learning. When developed, they enable a visually literate person to discriminate and interpret the visible actions, objects, symbols, natural or man-made, that he encounters in his environment. Through the creative use of these competencies, he is able to communicate with others. Through the appreciative use of these competencies, he is able to comprehend and enjoy the masterworks of visual communication.

Since its publication, Debes’ definition has been critiqued and revised by numerous VL scholars and practitioners, who have struggled to come to a consensus on a definition of VL. Mitchell (2008) discusses that the metaphor of VL itself has been a bit problematic. It suggests that seeing is somehow like reading, albeit seeing is already a requirement of reading text (Mitchell, 2008). In addition, the multidisciplinary nature of VL has caused varying contributors to emphasize only the aspects of VL that are most important to their perspective and that support their professional concerns. This has resulted in a widespread lack of agreement about which characteristics are central to a VL definition (Avgerinou & Ericson, 1997). The International Visual Literacy Association (IVLA), founded in 1968, has also notably not come to support a specific standardized definition of VL. It instead supplies a version of John Debes’ original definition on its website, along with words of support for the eclectic nature of the term and its various definitions (IVLA, n.d.). Avgerinou & Ericson (1997) discuss that, generally, concepts
without a widely accepted definition are based on unclear theory. This confusion is often
dealt with by abandoning the underlying theory altogether. However, they state that this
has never been the case with VL, as efforts to operationalize a definition continue on.

In an attempt to help operationally define VL, Brill, Kim, and Branch (2007)
conducted a Delphi study to elicit a first generation definition of VL from established
scholars and practitioners of VL. The Delphi technique was chosen as a method to pool
the collective opinions of the group, rather than seek specific correct answers.
Regrettably, the results of their study were inconclusive because of a lack of participation
and included a call for the IVLA to work toward a standard definition (Brill, Kim, &
Branch, 2007).

Though a shared definition does not exist, Avgerinou (2009) identified ten points
of convergence among VL theorists. These points included: a visual language exists; VL
is a cognitive ability but also draws on the affective domain; VL skills are used to
read/decode/interpret and to write/encode/create visual statements; VL skills are
learnable, teachable, and capable of being improved; and that visual communication,
visual thinking, and visual learning are inextricably linked to VL (Avgerinou, 2009). In
addition, Avgerinou (2007) had conducted a prior series of empirical studies aimed at the
creation and refinement of a VL index. Avgerinou (2007) used an integrated
methodological design (triangulation) to blend experimental, quantitative, and qualitative
elements into a five-stage study. The results included a validated operational definition
of VL, a validated VL index, and confirmation that VL is measurable. The operational
definition used for the study reads, “In the context of human, intentional visual
communication, visual literacy refers to group of largely acquired abilities, i.e. the
abilities to understand (read), and to use (write) images, as well as to think and learn in terms of images.” The eleven VL abilities identified by Avgerinou as most appropriate for inclusion in the VL index (2007) are: Visualization, Critical Viewing, Visual Reasoning, Visual Discrimination, Visual Thinking, Visual Association, Visual Reconstruction, Constructing Meaning, Re-Constructing Meaning, Knowledge of Visual Vocabulary and Definitions, and Knowledge of Visual Conventions. Despite her success in the identification of these VL skills, Avgerinou(2009) acknowledges that with the pace of change in the current digital and image-laden era, these skills may already be in need of reconsideration.

Images

Though the term VL relies on the “reading” metaphor to help describe its goals, images and texts convey information and meaning in fundamentally different ways (Collins, 1998; Layne, 1994; Messaris, 1993; Mifflin, 2007). Messaris (1993) writes that images are not just another language, which is exactly what makes them so unique and intriguing. To illustrate this, Collins (1998) likens the difficulties of putting images into words to that of describing music with words. Sara Shatford Layne (1994) adds that images can do things beyond the abilities of texts. She describes the way in which texts convey information and meaning through symbols, while images convey information by resembling objects as they appear. While having a wealth of information in a concise format, images contain many possible meanings that leave some researchers mistrustful of them (Martinez, 2009). Images, therefore, require different approaches and methodologies to assess their value than text does. Many students and scholars struggle
to find methods for interpreting images that are as thorough and gratifying as those used for textual materials (Martinez, 2009).

Institutions that collect visual images, like archives, libraries, and museums, must assess, interpret, and describe objects in order to organize them and provide access to users. Theoretical objectives used in the cataloging of texts can serve as a starting point for that of images, though further consideration of the uniqueness of images is needed (Shatford, 1984). Context, subject and descriptive cataloging, and the presence of related objects are topics especially important for archives to consider in developing new ways to provide access, arrange, and understand images.

The advent of postmodernism has greatly contributed to the nuances and challenges of interpreting images. As a result of postmodernism, the relationship between seeing and knowing has been broken by a new focus on multiple perspectives, context, and authorship (Rose, 2001). Postmodernism demands that additional questions be asked of images: Whose point of view is represented? Why? To what effect? Tim Schlak (2009) cites photographs, in particular, as examples of images that have gone from sources of unmediated truth to subjective interpretation since the introduction of postmodern interpretation. The photograph, like other images, represents a series of choices, is made for a purpose, and is intended for an audience. Schlack highlights that contemporary interpretations of photographs must always be conditional and without absolute truth, which he cites as a challenge for archivists who previously presumed the possession of truth.

In trying to critically identify meaning in images, Rose (2001) first identifies three sites at which meaning in images is created: the site of production, the site of the image
itself, and the site where an audience views it. Rose speculates that “audiencing” which occurs when an image’s meaning is actively renegotiated as an audience views it, may be the most important point of the creation of meaning to consider. She then suggests that each of these sites can be looked at with three different modalities. The first is technological, which examines how the image was made. The second is compositional, which considers formal strategies and material qualities. The third is social, which is a broad modality that includes the culture and environment in which the image was created and used.

In addition, interpreters must also take into account the multimodal nature of images, making sense of them in context with other available information, such as other objects, texts, or images (Mifflin, 2007; Rose, 2001). For example, with photographs captions or other notes may be critical to a proper interpretation by an archivist. Walter Benjamin believed that in order to maintain an image’s validity and authenticity, the caption was a necessary tool to connect the image to a specific time and place (Mifflin, 2007). Mifflin quotes Schwartz (2007) in saying that context, “transforms photographic images into photographic documents”. Layne promotes the development of access to images as groups of images to allow for the benefits of context. She writes that through grouping, comparisons within image groupings may be very useful to users during the research process, the verbalization of characteristics may come easier for searchers, and the retrieval of images with specific criteria could be visually scanned for (1994). Sometimes images are stripped away from their context and related objects. Rose (2001) makes three suggestions for critically approaching found visual images: take images seriously, look carefully; think about the social conditions and effects, both inclusions
and exclusions; and consider one’s own way of looking, thinking careful about the effects of perspective. Content analysis is seen as effective by Rose for dealing systematically with a large amount of images although, because it was originally developed for written and spoken texts, it neglects to account for the expressive qualities of an image (Rose, 2001).

The application of subject cataloging focuses on what a visual image is “of” or “about” (Shatford, 1984). In her paper, “Some Issues in the Indexing of Images”, Layne (1994) suggests three aspects of subject attributes that are particularly important in images. The first is that an image can be both of and about something. An image may be of wilting flowers, but be about death. The second is that an image is both generic and specific. An image may be of wilting flowers, and also be usefully described as plants or as lilies. Lastly, an image may be indexed as any of four facets: time, space, activities and events, and objects, and each facet may in turn be of or about.

Subject searching has been found by Collins (1998) to be the most popular method of searching for images in archives. In her paper “Providing Subject Access to Images: A Study of User Queries”, Collins analyzed patron requests from two historical photograph collections. She looked at the types of terms used and their attributes to determine if current indexing methods were meeting user needs. She found that generic terms were the most used, followed by time and place. Genre, visual terms, creator, provenance, and format were used infrequently. Three levels of analysis for images are discussed. The first, pre-iconographical, includes description derived from the knowledge of everyday experience and the primary subject matter. The second, iconographical analysis is the secondary subject matter, which requires a broader
knowledge of areas like literature, customs, and cultures. The third, iconographical interpretation, examines the underlying principles behind the image, including religion, nationalism, or social class. Collins suggests that any increase in the subject description of images, particularly generic description, would greatly improve access. Though she feels item level description would be the best for access, she acknowledges the difficulties of this due to the number of images in need of indexing. The author also suggests that the presence of thumbnail images in combination with textual description might be the best future course for image access (1998). However, further research on how users search for and use images would be helpful in further developing indexing strategies for images (Collins, 1998; Layne, 1994)

The use of descriptive cataloging for images is said to be a neglected form of image organization, and, according to Sara Shatford, historically less favored than subject cataloging (1984). Extensive use of description of images is important for both the preservation of materials and use by researchers (Kaplan & Mifflin, 1996). Stratford describes descriptive cataloging as including the name of the creators, title, production related facts, and information on its physical form. In her paper, she attempts to develop concepts and objectives to use as a theoretical basis for the descriptive cataloging of images as a means of evaluating, adapting, and applying contemporary formats and developing new ones. Shatford discusses art images as an example of an image type that should be interpreted with more than one function in mind. She finds that art images are often not interpreted as being both an aesthetic object and a transmitter of information. It is the opinion of Shatford that all art images are created with the intent to communicate information. Subject access has been developed around the needs of texts, and, Shatford
believes, is therefore inadequate for use on images. However, she concedes that the
differentiation between the subject of an image and a description of an image can be

Archivists

Archivists are aware that the increasing amounts of images in contemporary
society pose new challenges for the profession. Archivists have demonstrated this
awareness through the organization of conferences, workshops, committees, and Internet
discussion groups to address visual media issues in archives. However, Kaplan and
Mifflin have found that these attempts to address the visual have primarily focused on
physical and practical issues, and neglect core intellectual issues (1996). Due to
educational backgrounds composed mostly of history and library science, many scholars
cite archivists as lacking strong VL skills (Schlak, 2008; Mifflin, 2007), leaving them ill-
prepared for a nuanced understanding of images (Mifflin, 2007). Kaplan and Mifflin
state that library and archival degree programs lack specialization tracks for those
interested in visual resources, and that their curriculums devotes very little attention
visual materials (1996). Archivists have historically applied textual methods uncritically
to visual images (Schlak, 2008). Mifflin (2007) argues in “Visual Archives in
Perspective: Enlarging on Historical Medical Photographs” that archivists should be more
than passive preservers and processors of documents and should strive to share
responsibility with historians in “reading between the lines” of images. He calls for
increased specialization in archives as a way to aid this goal. In addition, several scholars
contend that archivists need to increase their readings of literature from outside the
archives field in order to properly approach images (Kaplan & Mifflin, 1996; Mifflin, 2007; Schlak, 2008). Archivists are called to strive to use their unique position and knowledge of their collections’ content and context to guide and teach “intelligent use” of images in research through VL skills (Mifflin, 2007). Archivists should strive to improve their understanding of VL and upgrade collection descriptions accordingly, actively engage in ongoing discussions of VL, and advocate for the inclusion of VL issues in archival education curriculums (Kaplan & Mifflin, 1996). Mifflin states that archivists who neglect to broaden their own competencies to grow toward a fuller understanding of the images under their stewardship are failing at their responsibilities (2007).
Methodology

The method chosen for this study was an online questionnaire survey. Creswell (2009) defines a survey design as “a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population.” Wildemuth (2009) explains that a survey is made up of items, either statements or questions, which participants of a selected population are asked to respond to. These responses can then be taken and used to statistically estimate the distribution of the survey’s targeted characteristics in the specified population. Surveys can be administered in a variety of ways, including face-to-face, over the phone, on paper, or online. They are generally as brief and directed as possible, allowing a large number of participants to respond in a short amount of time. The small amount of time invested by participants also increases the likelihood of a high participation rate. Since the survey is a popular method for contemporary research, it is familiar to much of the general population (Wildemuth, 2009). This familiarity may help to put participants at ease and increase response rates in the study.

Online surveys began to grow in popularity in the late 1990s, and are now used frequently (Shropshire, Hawdon, & Witte, 2009). Online surveys are self-administered and accessible to participants at any time, day or night, during the survey period. The self-administering aspect of online survey has several benefits. Participants gain the advantage of being unaffected by the presence of the researcher, unlike in face-to-face interviews or focus groups. The researcher benefits by shifting the costs of data entry to participants, which they would otherwise do themselves or hire others to help with. Before self-administered surveys were available online, they were often sent out as
physical copies through the postal system, which has the disadvantage of postage costs to
the researcher and a longer turn-around time for results. Online interview software also
makes analyzing and presenting data easier and faster for the researcher, with the ability
to create tables and graphs within many software applications. Online surveys also
incorporate computer technology to create skip patterns for questions that do not apply to
participants based on their previous responses. This customization of the survey
experience for each individual user can help increase response rates and decrease dropout
rates. The ability to customize the survey appearance can also aid in a more engaging
experience for participants (Shropshire, Hawdon, & Witte, 2009).

The online survey was chosen as the appropriate method for the study for several
reasons. The study looked to address trends and questions related to working archivists
and VL all over the United States. The goal was to gain a generalized understanding
from a sample of the population, which surveys are well to. The online aspect sought to
address the wide distribution of the potential participants without the postal costs of
mailing a printed survey. It also sought to allow potentially busy working archivists the
flexibility to decide when, where, and at what pace they responded (Wildemuth, 2009).
Finally, the method worked well with the time and financial constraints imposed upon the
researcher.

Much of the questionnaire was developed using Avgerinou’s eleven VL abilities
identified in her VL index to evaluate the appropriateness of their use in archives. These
abilities are: Visualization, Critical Viewing, Visual Reasoning, Visual Discrimination,
Visual Thinking, Visual Association, Visual Reconstruction, Constructing Meaning, Re-
Constructing Meaning, Knowledge of Visual Vocabulary and Definitions, and Knowledge of Visual Conventions.

**Participants and Recruitment**

The sample for the study was made up of archivists actively working in the United States. Potential participants were recruited through the Archives & Archivists List of the Society of American Archivists. Though a random sample would have been preferable, a convenience sample was used, restricting the ability to generalize accurately. Participants were self-selecting for inclusion following the distribution of survey invitations. The study did not include stratification, or the sampling within participants with predetermined characteristics (Creswell, 2009). No financial incentives were offered for participation.

**Data Collection**

The data collection instrument developed for the study was an online questionnaire created with Qualtrics software provided by The Odum Institute at the University of North Carolina at Chapel Hill. Qualtrics allows for multiple question types to be used, including single response, “check all that apply,” numeric entry, alpha entry, grid style, and questions with images. It also provides skip logic, fills, management tools, online analysis tools, and data set downloading.

The questionnaire was made up of ten items; including the informed consent form. The final screen of the survey provides a note thanking respondents for their participation. Questions were both open and close-ended. The questionnaire was
designed to elicit information about participants, information on the application of the VL index to archival work, and opinions on the need for increased VL training among archivists. A complete copy of questionnaire items can be found in the appendix.

Survey Procedure

The survey occurred over a three-week period. Upon receiving approval from the Institutional Review Board, the process began by sending out survey invitations to the Archives and Archivists List. As participants responded to the invitations by clicking the embedded link, they were taken directly to the online questionnaire. Due to a satisfactory initial response, no further sets of survey invitations were sent out. Data collection ended after the third week.

Ethical Considerations

Participation in the survey was contingent upon completion of the informed consent form. This form identified the researcher and sponsoring institution and provided appropriate contact information. Participants were assured of confidentiality and their ability to withdraw from the survey at any time. Data collected from participants will not be shared and proper precautions will be taken to prevent the disclosure of sensitive or identifying information. The only potentially identifying information collected from participants was the IP address of the computer used to take the online survey. This information was collected automatically by the Qualtrics software and was deleted following the close of the survey period. Data results will be maintained for approximately five years and then destroyed. To ensure compliance with
ethical requirements, the study was approved by the Institutional Review Board of the University of North Carolina at Chapel Hill prior to the launch of the survey.

Limitations

The survey method, and this study specifically, has both advantages and disadvantages. Surveys are most useful when sampling is done randomly. This study instead used convenience sampling, which results in a less reliable generalization of data. Bias due to non-response and measurement error are common problems with population inferences generated from the survey process (Shropshire, Hawdon, & Witte, 2009).
Results

The survey had a total of 82 participants. The entirety of the survey was completed by 84% of participants. Participants were allowed to choose not to answer any given item and skip logic was used to navigate participants past items that did not apply to them; as a result, the number of responses to each item varies from 41 to 82. The average time to complete the questionnaire was four minutes.

The survey included items aimed at learning more about participants’ formal educational backgrounds to address claims that Archivists tend to only have training in History or Library Science. The majority of participants in the survey identified their undergraduate degree as Bachelor of Arts degree, though many did not specify the area of concentration. Of those specified, the majorities were in English or History. To evaluate postgraduate education, participants were asked to choose between History, Library Science, and Other. Of the 78 respondents, 29 (37%) selected History, 58 (74%) selected Library Science, and 20 (26%) selected Other (see Table 1). The 20 respondents who selected Other were asked to specify their area of postgraduate education. These responses varied and included both Masters degrees and certification programs. Of these, the majority (6) were a type of Archives and Records Management program, such as Certificates in Archives Management and Archives and Records Management, which perhaps had similar curricula as the Library Science programs. In addition, Museum related degrees or certificates (3) ranked as the second most common in the Other category.
Table 1. Item 3 results.
What postgraduate degrees have you earned? (Check all that apply.)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>29</td>
<td>37%</td>
</tr>
<tr>
<td>Library Science</td>
<td>58</td>
<td>74%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>20</td>
<td>26%</td>
</tr>
</tbody>
</table>

In order to assess if participating Archivists may have had training applicable to VL outside of a formal degree or certificate programs, participants were asked to indicate if they had received any training in any of the following areas: Visual Literacy, Fine Arts, Art History, Graphic Design, or None of the Above. Just under half of the participants in this item (37 out of 78) selected None of the Above, indicating they had no previous training in any of the selected areas. Of those who did have experience in one or more of these areas (41 out of 78), Art History was selected by 32 participants, Fine Arts by 22 participants, Visual Literacy by 13 participants, and Graphic Design by 13 participants (See Table 2). Those participants who indicated training in one or more of the specified areas were directed to a follow-up question to indicate the approximate level of training they had received in these areas. Those who selected None of the Above automatically skipped the follow-up question. The three levels of training participants were able to select from were: Introductory, Overview, and Extensive. Of the 41 respondents of this item, 15 (37%) indicated extensive training, 13 (32%) indicated overview training, and 13 (32%) indicated introductory training.
Table 2. *Item 4 results.*
Have you ever received training in the following areas? (Check all that apply.)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
</table>
| Visual Literacy   | 13       | 17%
| Fine Arts         | 22       | 28%
| Art History       | 32       | 41%
| Graphic Design    | 13       | 17%
| None of the above | 37       | 47%

In order to gain a further understanding of the participants’ backgrounds, they were asked to select which of the following areas best describes their primary area of work in archives: Reference, Education/Outreach, Processing, Appraisal, or Other. Of the 78 respondents to this item, Processing was selected most often with 32 (41%) indicating it was their primary area of work. Other was selected by 27 (35%) of respondents, making up the second largest area. No follow-up question was included to assess what areas of work respondents would have included as Other. Of the remaining, Reference was selected by 10 (13%) respondents, Appraisal by 7 (9%), and Education/Outreach by only 2 (3%).

Items 7 and 8 used a Lickert-type scale in combination with the eleven VL abilities identified by Avgerinou (2007) in her VL index. Item 7 asked participants to respond the statement; “I am comfortable and confident in performing tasks with images that require” followed by the specific VL capability in question. The Item 8 asked participants to respond to the statement; “I find the following terms applicable to the work I do as an archivist.” Results for each of the eleven VL abilities are shown in the following tables 3 and 4. In both items, the majority of respondents selected Agree for each of the abilities, with the exception of five items to which the majority responded,
Neither Agree Nor Disagree. The mean in all but one (Critical Viewing in Item 8) fell between Neither Agree Nor Disagree, which had an assigned value of 3, and Agree, which had an assigned value of 4. All responses means fell on the Agree side of the Lickert scales.
Table 3. *Item 7 results.*

Please respond to the following: I am comfortable and confident in performing tasks with images that require:

<table>
<thead>
<tr>
<th></th>
<th>Item Description</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Responses</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Visualization</td>
<td>1</td>
<td>4</td>
<td>15</td>
<td>32</td>
<td>12</td>
<td>64</td>
<td>3.78</td>
</tr>
<tr>
<td>2</td>
<td>Critical Viewing</td>
<td>1</td>
<td>2</td>
<td>15</td>
<td>32</td>
<td>15</td>
<td>65</td>
<td>3.89</td>
</tr>
<tr>
<td>3</td>
<td>Visual Reasoning</td>
<td>1</td>
<td>1</td>
<td>20</td>
<td>31</td>
<td>11</td>
<td>64</td>
<td>3.78</td>
</tr>
<tr>
<td>4</td>
<td>Visual Discrimination</td>
<td>1</td>
<td>3</td>
<td>15</td>
<td>30</td>
<td>15</td>
<td>64</td>
<td>3.86</td>
</tr>
<tr>
<td>5</td>
<td>Visual Thinking</td>
<td>1</td>
<td>2</td>
<td>17</td>
<td>31</td>
<td>14</td>
<td>65</td>
<td>3.85</td>
</tr>
<tr>
<td>6</td>
<td>Visual Association</td>
<td>1</td>
<td>2</td>
<td>15</td>
<td>35</td>
<td>12</td>
<td>65</td>
<td>3.85</td>
</tr>
<tr>
<td>7</td>
<td>Visual Reconstruction</td>
<td>2</td>
<td>5</td>
<td>31</td>
<td>16</td>
<td>8</td>
<td>62</td>
<td>3.37</td>
</tr>
<tr>
<td>8</td>
<td>Constructing Meaning</td>
<td>2</td>
<td>5</td>
<td>13</td>
<td>31</td>
<td>13</td>
<td>64</td>
<td>3.75</td>
</tr>
<tr>
<td>9</td>
<td>Reconstructing Meaning</td>
<td>2</td>
<td>5</td>
<td>23</td>
<td>26</td>
<td>8</td>
<td>64</td>
<td>3.52</td>
</tr>
<tr>
<td>10</td>
<td>Knowledge of Visual Vocabulary and Definitions</td>
<td>2</td>
<td>8</td>
<td>19</td>
<td>24</td>
<td>12</td>
<td>65</td>
<td>3.55</td>
</tr>
<tr>
<td>11</td>
<td>Knowledge of Visual Conventions</td>
<td>2</td>
<td>6</td>
<td>30</td>
<td>17</td>
<td>10</td>
<td>65</td>
<td>3.42</td>
</tr>
</tbody>
</table>
Table 4. *Item 8 results.*
Please respond to the following: I find the following terms applicable to the work I do as an archivist:

<table>
<thead>
<tr>
<th></th>
<th>Term</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Responses</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Visualization</td>
<td>3</td>
<td>5</td>
<td>13</td>
<td>27</td>
<td>11</td>
<td>59</td>
<td>3.64</td>
</tr>
<tr>
<td>2</td>
<td>Critical Viewing</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>28</td>
<td>20</td>
<td>60</td>
<td>4.03</td>
</tr>
<tr>
<td>3</td>
<td>Visual Reasoning</td>
<td>1</td>
<td>6</td>
<td>15</td>
<td>28</td>
<td>9</td>
<td>59</td>
<td>3.64</td>
</tr>
<tr>
<td>4</td>
<td>Visual Discrimination</td>
<td>3</td>
<td>4</td>
<td>10</td>
<td>29</td>
<td>14</td>
<td>60</td>
<td>3.78</td>
</tr>
<tr>
<td>5</td>
<td>Visual Thinking</td>
<td>1</td>
<td>1</td>
<td>21</td>
<td>24</td>
<td>13</td>
<td>60</td>
<td>3.78</td>
</tr>
<tr>
<td>6</td>
<td>Visual Association</td>
<td>3</td>
<td>1</td>
<td>21</td>
<td>21</td>
<td>14</td>
<td>60</td>
<td>3.70</td>
</tr>
<tr>
<td>7</td>
<td>Visual Reconstruction</td>
<td>3</td>
<td>4</td>
<td>25</td>
<td>20</td>
<td>6</td>
<td>58</td>
<td>3.38</td>
</tr>
<tr>
<td>8</td>
<td>Constructing Meaning</td>
<td>3</td>
<td>2</td>
<td>15</td>
<td>23</td>
<td>17</td>
<td>60</td>
<td>3.82</td>
</tr>
<tr>
<td>9</td>
<td>Reconstructing Meaning</td>
<td>4</td>
<td>3</td>
<td>23</td>
<td>15</td>
<td>15</td>
<td>60</td>
<td>3.57</td>
</tr>
<tr>
<td>10</td>
<td>Knowledge of Visual Vocabulary and Definitions</td>
<td>3</td>
<td>7</td>
<td>17</td>
<td>21</td>
<td>12</td>
<td>60</td>
<td>3.53</td>
</tr>
<tr>
<td>11</td>
<td>Knowledge of Visual Conventions</td>
<td>1</td>
<td>5</td>
<td>21</td>
<td>23</td>
<td>11</td>
<td>61</td>
<td>3.62</td>
</tr>
</tbody>
</table>

The final two items on the questionnaire also asked users to respond to a statement with a Lickert scale. These two items were intended to poll participants on their perception of need for increased Visual Literacy in archives. Item 9 stated, “Please
respond to the following: I do NOT think that increased training in Visual Literacy would benefit the quality of work done in archives today.” The majority (31 participants) selected Disagree, and 16 selected Strongly Disagree. Item 10 stated, “I would support additional training in Visual Literacy designed for the archives environment.” The majority of responses to this time were Agree (36 of 63 participants). Full responses for items 9 and 10 can be seen in Tables 3 and 4, respectively.

Table 3. *Item 9 results.*

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Responses</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do NOT think that increased training in Visual Literacy would benefit the quality of work done in archives today.</td>
<td>16</td>
<td>31</td>
<td>14</td>
<td>0</td>
<td>2</td>
<td>63</td>
<td>2.06</td>
</tr>
</tbody>
</table>

Table 4. *Item 10 results.*

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Responses</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would support additional training in Visual Literacy designed for the archives environment.</td>
<td>0</td>
<td>0</td>
<td>15</td>
<td>36</td>
<td>12</td>
<td>63</td>
<td>3.95</td>
</tr>
</tbody>
</table>
Discussion

The purpose of the survey was to obtain answers to the following research questions about VL in relation to archives: do archivists tend to have any previous training in VL related skills? Do archivists think that the skills identified in the VL index developed by Avgerinou (2007) are appropriate to apply to their work? Finally, how do they perceive their own VL? The above results provide preliminary answers to these questions and suggest areas that may need to be addressed further.

Of the respondents (78 total) to Item 3 (What postgraduate degrees have you earned?), 74% (58) had a postgraduate Library Science degree and 37% (29) had History degrees (see Table 1). This information supports the concern of proponents of VL that archivists have backgrounds mostly composed of training in History or Library Science. In addition, the responses to Item 4, which asked about other training in areas that teach skills related to VL, also support this claim with 47% (37) of respondents indicating they had no training in any of these areas. However many respondents to this item did report having some level of training in one or more of the VL related areas (Visual Literacy, Fine Arts, Art History, and Graphic Design). The level of training in these areas was split fairly evenly between Introductory (32%), Overview (32%), and Extensive (37%).

The participating archivists were asked if they perceived the eleven VL skills identified by Avgerinou (2007) as applicable to their work in Item 8 (full results shown in Table 4). Results for each of the skills had a mean of between 3.33 and 4.03, with the value of 4 equal to the response Agree. With the majority of responses averaging between Neither Agree nor Disagree and Agree and all means falling on the Agree side of the Lickert scale, two conclusions can be drawn. The first possible interpretation is
that the VL index put forth by Avgerinou (2007) is applicable to the work that archivists do. If this is the case, these skills can be used in future studies to develop a test for VL skills to be used in future research into VL in archives. However, it is also possible to look at these results and question whether or not the respondents had a good understanding of the terms. It is possible that all the skills were given similar responses because participants used Agree and Neither Agree nor Disagree as default responses. However, responses indicating strong agreement outnumber those of Strongly Disagree and Disagree in all eleven instances, leaving the overall impression that the participant archivists found the VL skills overall applicable to their work.

Three items were incorporated into the questionnaire to assess how the participating archivists felt about their own VL. Item 7 (full results in Table 3) asked respondents to indicate if they felt comfortable and confident in performing tasks with images in respect to each of the eleven VL skills. As with Item 8, the mean of all responses fell between Neither Agree Nor Disagree and Agree, with means ranging from 3.37 to 3.89. This again could indicate that many of the respondents were unsure about the terms used and replied with Neither Agree Nor Disagree or Agree as a result. However, as with Item 8, the responses were overall positive indicating that participating archivist felt mostly comfortable and confident in applying the VL skill to images in their work.

The next item, Item 9, related to archivists’ perception of VL in archives asked respondents to indicate if they thought increased VL training would not benefit the quality of work done in archives. Of the 63 respondents, 47 strongly disagreed or disagreed that VL training would not be beneficial, with only 2 respondents strongly
agreeing or agreeing. Item 10 asked if they would support training VL designed for the archives environment. Respondents mostly agreed or strongly agreed with this statement (48 of 63 respondents), with none disagreeing. In assessing how the participating archivists felt about their own VL, the results suggest that while they feel positive about their own VL skills, they also perceive that increased training would be beneficial and would support this increased training in their archive.
Summary

It has been suggested that images present a set of unique concerns for archivists and that VL skills have much to offer in the interpretation, organization, and access of images in archives. Historically, unclear definitions of VL have caused difficulties in identifying effective ways to begin studying VL in practice. However, Avgerinou’s work has made considerable progress towards making this possible through the development of a VL index (2007). Though little research has been done with VL and archives specifically, the results of this study support the application of the VL index to work done by archivists. The results also show that archivists are likely to be, as some scholars have asserted, ill-equipped to interpret and organize images, due to fundamental differences between images and text and their educational background. It should be determined if VL is indeed an area of concern in archives so that steps may be taken to ensure that archivists are able to take advantage of their unique positions to effectively apply VL skills to images in their care and to act as teachers of VL skills to the users of those images. In order to ensure that archives move forward in innovative and timely manner, archivists need to be equipped with VL skills to address the ever-increasing volume and use of images in daily life. This study hopes to draw attention to the need for increased consideration of and additional research into archival work with images.
References


Appendix

University of North Carolina-Chapel Hill
Consent to Participate in a Research Study

IRB Study # 11-0278
Consent Form Version Date: 2/20/11

Title of Study: Visual Literacy in Archives

Principal Investigator: Natalie Moix
UNC-Chapel Hill Department: School of Information and Library Science
UNC-Chapel Hill Phone number: (919) 962-8060
Email Address: info@lia.unc.edu
Faculty Advisor: Christopher Lee
Faculty Advisor email: collins@email.unc.edu
Study Contact email: nmooi@email.unc.edu

What are some general things you should know about research studies?
You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty. Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You should ask the researchers named above any questions you have about this study at any time.

What is the purpose of this study?
The purpose of this research study is to learn about Visual Literacy in archives from archivists.

Are there any reasons you should not be in this study?
You should not be in this study if you do not identify as a working archivist.

How many people will take part in this study?
If you decide to be in this study, you will be one of approximately 50 to 100 participants.

How long will your part in this study last?
The online survey will take approximately five minutes to complete.

What will happen if you take part in the study?
You will be asked to respond to a series of questions regarding your educational background, work as an archivist, and Visual Literacy. You do not have to answer any questions that you do not wish to answer, for any reason.

How will your privacy be protected?
No identifiers will be collected. Participants should be aware of their surroundings while taking the survey to ensure their privacy.

What if you have questions about your rights as a research participant?
All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at (919) 966-3113 or by email to IRB_subjects@unc.edu.

-----------------------------

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. By clicking on the "Agree" button below, I voluntarily agree to participate in this research study.

- I agree
- I do NOT agree.

Survey Powered By Questify
Please list any undergraduate degree(s) you have earned.

What postgraduate degrees have you earned? (Check all that apply.)

- History
- Library Science
- Other (please specify)

Survey Powered By Qualtrics
Have you ever received training in the following areas? (Check all that apply.)

- Visual Literacy
- Fine Arts
- Art History
- Graphic Design
- None of the above.

How would you describe the level of training you received in these areas?

- Introductory
- Overview
- Extensive
Which of the following best describes your primary area of work in archives?

- Reference
- Education/Outreach
- Processing
- Appraisal
- Other

Please respond to the following:
I am comfortable and confident in performing tasks with images that require:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visualization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Critical Viewing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Reasoning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Discrimination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Thinking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Association</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual Reconstruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructing Meaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconstructing Meaning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of Visual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary and Definitions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge of Visual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please respond to the following: I find the following terms applicable to the work I do as an archivist:

<table>
<thead>
<tr>
<th>Term</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visualization</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Critical Viewing</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Visual Reasoning</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Visual Discrimination</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Visual Thinking</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Visual Association</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Visual Reconstruction</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Constructing Meaning</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Reconstructing Meaning</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Knowledge of Visual Vocabulary and Definitions</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Knowledge of Visual Conventions</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Please respond to the following:
I do NOT think that increased training in Visual Literacy would benefit the quality of work done in archives today.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Please respond to the following:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would support additional training in Visual Literacy designed for the archives environment.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>