Generic U: comparing photographic images in high- and low-ranked university view books

Deanna M. Woolf

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A Thesis

entitled

Generic U:

Comparing Photographic Images in High- and Low-Ranked University View Books

by

Deanna M. Woolf

Submitted to the Graduate Faculty as partial fulfillment of

the requirements for a Master Of Liberal Studies Degree

____________________________________________
Dr. James Benjamin, Committee Chair

____________________________________________
Dr. Patricia Komuniecki, Dean
College of Graduate Studies

The University of Toledo

May 2010
Coding tools are used to examine whether differences exist in photographs from view books from first tier and fourth tier institutions, as ranked by *U.S. News and World Report*. Both a coding tool from a previous study that categorized images and an attribute coding tool previously applied only in presidential campaign analysis were used. The results of the study indicate there may be some significant differences in the photographs found in high- and low-ranked universities' view books, but the types of photographs overall remain largely the same between these two groups.
For Grandma Helen, Auntie Irene, Grandma Toady, Grandma Lois, Grandma Ruth, Aunt Rose, and Aunt Grace. You were thankful just to be able to graduate high school. Because of you, I've been able to graduate college . . . twice.
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Chapter 1

Introduction

Each year, high school seniors receive hundreds of pieces of mail from college admissions offices in the hopes of enticing the recipient to enroll as a freshman the following fall. Among these are view books, which showcase basic information on the institution's majors, housing, campus life, admission processes, and more.

From the college and university perspective, high school students and their parents are the most important people to reach with these print publications, which plead their case with text and photographs (Kittle, 2000). While the persuasive goal of the text is easily discernable, what kinds of messages are the photographs sending to the students? Though they do not have explicit words or phrases connected with them, the visual elements that make up the photograph can convey information to the viewer about the school, thereby potentially influencing his or her decision about enrolling at the institution.

This study seeks to analyze the photographs from college view books to determine what messages are being sent and what is being conveyed to the audience. It is a visual analysis of view books, comparing high- and low-ranked schools.
Chapter 2

Review of the Literature

2.1 Definition of "View Book"

The word "view book" first appeared in print in 1956 and is defined as "a promotional booklet with pictures that is published by a college or university and used specially for recruiting students" ("View book," 2009). The word was predated by "prospectus," which appeared in print in 1823 and is defined as a "brochure detailing or advertising the facilities or activities of a school, university or other educational institution" ("Prospectus," 2009). Hartley and Morphew (2008) explain that the purposes of these brochures are to "entice students to matriculate" and "play a substantial role in shaping how students think about the college experience during the early 'attentive search' stage of the college choice process" (pp. 671, 673).

In his introduction to one of the first major publications guides for colleges and universities, *The American College Catalog*, Thompson (1917) traced the development of the view book/prospectus from the college catalog, which listed the courses available each semester:

The earlier catalogs were simple announcements without apparent effort to do more than give the necessary facts. As colleges grew in numbers, both as to faculties and students, and as the elective idea prevailed among them, catalogs began to expand and courses were greatly multiplied, subjects were subdivided
beyond recognition. This apparently made it necessary for the authorities to explain what they were teach and why they were teaching it . . . a catalog, therefore, reveals . . . necessary information for the prospective student. In the later years, the catalog has come to be distinctly a catalog of advertising. (p. xiii)

Arden and Whalen (1978) explained that in lieu of sending these large, several-hundred page "advertising" catalogs to prospective students, schools began to send "small, illustrated, concise admission booklets," which came to be known as a "prospectus, view book, or admission booklet" (pp. 45, 47). They called early efforts at such view books little more than picture books, "a sort of photo album of college life" (p. 56).

Later, however, the view book developed into a more sophisticated tool, blending information and photos to entice prospective students to apply and attend. Arden and Whalen (1978) listed the most common elements included in this new generation of view books:

A discussion of college choice, statement about the college or university, the courses of study, admission requirements, housing, a campus map, costs and financial aid, ROTC programs, student services, campus activities, religious opportunities, accreditation, athletics, student government, social life, the academic calendar, a directory for correspondence, glossary of college terms, regulations (p. 56).

The concept of the "view book" has also made the transition to the World Wide Web, with the Merriam-Webster Online Dictionary expanding its definition of a view book to include any online incarnation of such booklet ("View book," 2009).

2.2 View Book Analyses

Few studies in the field of college marketing and advertising focus solely on the view book for insights; instead, studies of overall admissions publications and other
advertising elements are much more plentiful, as described in later sections. The view
books studies that do exist vary in their perspectives, the research questions, and their
methodologies.

Durgin (1998) is one of the earliest published researchers to study the view book. In
particular, she looked at textual elements, giving introductory paragraphs from six
schools' view books to 100 students and asking them to identify the described school.
Students were not able to match the school with the description correctly, leading her to
remark that "students should not expect that every college will sound remarkably
different from the other colleges in the same league because of the competitive stress"
(Durgin, 1998, p. 28).

O'Connor (2000) queried high school guidance counselors to gain their opinions
on view books. In a message sent to the National Association for College Admission
Counseling (NACAC) e-mail listserv, he asked what their and their students' opinions of
the books were. A theme emerged among the response; many look at the books to get an
impression of college rather than reading each line of text. One counselor remarked, "Sad
to say, some students read, most don't. View books work best if they have lots of
pictures, lists, and not so much text" (O'Connor, 2000, p. 166). Another added, "My
students [look] at them for a postcard view of the campus" (O'Connor, 2000, p. 166).

Klassen (2001) went beyond the opinions of students and counselors to conduct a
quantitative analyses of view book images, comparing top and lower ranked universities
according to the 1998 U.S. News and World Report "Best Colleges" rankings. He
randomly selected 32 view books and conducted a content analysis of the photographs.
Compared to lower ranked schools, top institutions had a significantly higher proportion
of images in the following categories: students engaged in artistic activities; students attending class; culture/arts events and activities; the city in or next to which the university is located; students involved in internships; the faculty; faculty profiles; science labs; students studying inside; teachers working one-on-one or in small groups with students; and technology other than a personal computer. Lower ranked schools, however, had a significantly higher proportion of images featuring outdoor beauty; students and others attending graduation ceremonies; students involved in intramural sports; student spectators at intervarsity sports, fairs, carnivals, and parades; students exercising in fitness centers; students involved in outdoor recreation; student profiles; students involved with university radio, TV, and newspaper; alumni profiles; students working with small children; students studying outside; and students playing in the student union.

Overall, looking at the differences between the two categories of schools, Klassen (2001) argued that faculty are the "face" of the higher ranked institutions, and students are the "face" of the lower ranked institutions. He added that the "promise" of higher education (i.e., the benefits) is shown as happening over time at higher ranked schools through student/professor interaction, cultural events, and artistic activities. At lower ranked schools, however, the "promise" happens on graduation day and the days following it.

Hite and Yearwood (2001) also used the U.S. News and World Report college listings to draw a sample of view books to study. They requested view books from a sample of schools from the following categories on the U.S. News and World Report Web site: liberal arts, women's, religiously affiliated, public, private, national, and regional
schools. They then examined the types of photos present in the view books by looking at the overall sample versus the separate categories compared to one another, as Klassen (2001) had done. Hite and Yearwood (2001) reported that 88 percent of view books had pictures on the front cover, the majority of which depicted student life. Inside the books, 96 percent had student life photos; 66 percent included athletic photos; 65 percent included student/teacher photos; 38 percent had campus housing photos; 34 percent had faculty photos; 9 percent had club/organizational photos; and 9 percent had photos of the school mascot. Overall, students were an important component of view book photos; but one cannot draw distinctions between schools or categories from this study.

Hartley and Morphew (2008) conducted their study of view books and identified six thematic areas contained in their sample. They reviewed 48 view books plus 15 from schools identified as recipients of the Carnegie Foundation for the Advancement of Teaching's community engagement classification or as a "College with a Conscience" by The Princeton Review. They found that overall, the view books' text and photographs centered around the following themes: institutional context/campus features; academics/faculty; co-curricular opportunities; admissions and financial aid; value of an education; and the purpose of higher education. More specifically, Hartley and Morphew (2008) reported these themes were carried out in order to portray an idealized college experience:

If prospective students were to define colleges and universities solely by what appears in view books they would quickly conclude that campuses are idyllic havens. They are proximate either to exciting cosmopolitan centers or the wholesome great American outdoors. They are filled with happy and healthy students (in only a few instances were the presence of a health or counseling center mentioned). Undergraduates are a racially diverse and a generally attractive group — all are in their late teens or early twenties. There are no disabled, obese, or depressed students. Everyone belongs. There are unparalleled opportunities for
students to participate in a range of stimulating (if not outright “fun”) activities inside the classroom (with smiling, attentive faculty members at hand) not to mention a myriad of co-curricular options. Classes tend to be small. The faculty are a mixture of Marie Curie, Mr. Chips, and Mr. Rogers, notable for their international scholarly reputations, commitment to teaching and nurturing attentiveness to each “special” student in the academic neighborhood. Happily, all colleges and universities have a range of financial aid options — especially scholarships — that render postsecondary education “affordable” (so much so that many view books don’t need feel the need to trouble the reader with petty details such as how much tuition is). In sum, view books paint a hopeful, idealized and somewhat unrealistic portrait of undergraduate life (p. 677).

Hartley and Morphew's (2008) study was the most recent, at the time of this writing, published about the view book.

2.3 Admission Materials Research

The view book itself is often part of a larger package of materials colleges and universities use to market themselves to prospective students. This group of materials can include things such as view books, financial aid brochures, information on campus housing, campus maps, letters from administrators, etc. Several researchers have looked at the overall group of materials sent by admission offices to prospective students. These studies include findings that build a foundation for and inform the present research on view book photography.

Three studies, Esteban and Apel (1992), Anderson (1994), and Canterbury (1989), involved analyzing the mailings students received from schools after inquiring or indicating some type of interest.

The work of Esteban and Apel (1992) provides basic information about the types of marketing materials sent to students by institutions. The researchers sent letters of inquiry to 330 colleges and universities and analyzed the materials they received. Admission applications made up 96 percent of the mail, view books were 80 percent of
the materials received, and letters represented 61 percent of responses. Delving into
photography, the researchers noted that most view book covers featured images of
campus or people (26 percent and 23 percent, respectively). However, they did not
analyze photography throughout the rest of the view books or the other types of
materials.

Anderson (1994) sent letters of inquiry to four universities, posing as a high
school freshman, sophomore, junior or senior. The researcher analyzed mailings received
from the schools and noted that many of the institutions used photographs of classrooms,
labs, and computer facilities to demonstrate learning. Overall, he observed:

Green campuses and social scenes were abundant in the view books analyzed. Photos showed students talking in small groups, in residence halls, dancing, and both participating in and watching athletic events. Students wore "Plains" or "Northern" sweatshirts and carried books and backpacks across campus. As one aspect of segmentation, it is interesting to note that most of the photographs included women and minority students (Anderson, 1994, p. 36).

Canterbury (1989) conducted a qualitative analysis of materials his daughter
received after signing up on the PSAT (Preliminary Scholastic Aptitude Test) to receive
college materials. She received more than 120 mailings from 114 different schools over a
50-day period. He remarked that most of institutions used posed, full-color photographs
in their admissions publications, and that:

the numbing pervasiveness of posed four-color photographs robs campuses of any sense of spontaneity. The places and the people are too neat, too pretty, too inanimate to be credible. Taken together in the mass material coming into our home representing higher education, the people pictures are impossible to identify with (Canterbury, 1989, pp. 12-14).

Both of these researchers' findings echo Smith's (1991) industry observations that the
majority of admissions materials show that "no university in America admits a plain-
looking man or women . . . and not one of our residence halls has a leaking faucet . . . they were all constructed within the year and benefit from professional interior design" (pp. 1-2).

Do students pick up on these messages that researchers believe are being sent to them? Klassen (1999) and Armstrong and Lumsden (1999) reviewed admission materials with students to gauge their perceptions. Klassen (1999) conducted a study about the misconceptions students have about college, possibly relating to what they see in admission materials. He surveyed high school students and found that they estimate, in college, to spend more time attending class outside; taking part in artistic endeavors; being involved as interns; working in science labs; working one-on-one or in small groups with professors; playing intramural sports; attending athletic events; and using technology. The students also reported to expect to spend less time studying inside, working at a job, and spending time with one's family. In these cases, the high school students' expectations significantly differed from the actual time college student spent doing these things, leading Klassen (1999) to conclude that promotional images of higher education can mislead students.

Armstrong and Lumsden (1999) interviewed current college students about the promotional materials they had received from their school, prior to enrolling. Using a "cut and paste" method to answer research questions from the transcripts, they reported that half the students saw the booklet and brochure sent to them through the mail. When questioned further about photography in the materials, many of the students described pictures as "cheesy," which they define as "out-of-style, silly or stupid" or "they think they are popular or funny, but really are not" (Anderson & Lumsden, 1999, pp. 88-89).
The students did not feel the photography authentically or accurately depicted the campus once they started classes.

2.4 University Image Analysis

In addition to view books and other admission materials, universities also convey images of themselves through TV commercials, often those during college bowl games. Several researchers have analyzed these institutionally focused advertisements to see what campuses choose to portray about themselves.

Tobolowsky and Lowery (2006) analyzed campus PSA (public service announcement) TV commercials during the 2003-04 and 2004-05 college football bowl game seasons and noted the primary theme that emerged through a combination of visual, audio, and textual elements was “college life is innocent, honors tradition and history, and embraces the future” (p. 236). They noted this was achieved through association with the school motto, symbolic elements (like the architecture, logo, or seal), and emblematic links (such as rankings, history, and majors offered).

Harris (2009) also studied college TV commercials during the football bowl games for the 2006-07 season and found that most of the commercials referenced campus characteristics (size, beauty, community/family); academics (variety and uniqueness of academic programs, research by faculty and students, contact with faculty, award-winning, renowned faculty); co-curricular engagement (exciting and fun, outdoor recreation, athletics, community service); prestige building (rankings, history/tradition, cutting edge, successful alumni); and mission/purpose (help achieve dreams, exploration, economic development, service to the state).
2.5 Presidential Image Analysis Studies

The higher education view book and promotional materials studies mentioned thus far have employed categorization techniques to analyze photographs and images. While those researchers drew inferences based on what messages they believed the categories of photographs were sending, the message actually received can vary significantly depending on who is doing the interpreting. However, research published in the political science and communication fields uses a coding system derived from years of nonverbal communication research to draw inferences about messages sent by human behavior in photographs.

Moriarty and Garramone (1986) conducted the seminal study in this area. They analyzed photographs of the 1984 presidential candidates using a coding system for image attributes based on nonverbal communication, person perception, and photographic quality research. For each attribute (such as torso, arms, or camera angle), they developed a definition for what that attribute would look like for favorable, unclear, or unfavorable portrayals. Each of these categories was assigned a point value, with favorable equaling 3 points, unclear equaling 2 points, and unfavorable equaling 1 point. The researchers then coded the images with this point scale. Moriarty and Garramone (1986) found that Ronald Regan had the significantly higher scores in face, setting, and size of the photograph (p. 728). They also noted he was portrayed more favorably overall than Walter Mondale, who lost the election (Moriarty & Garramone, 1986, p. 728).

Moriarty and Popovich (1991) repeated the study for the 1988 presidential election, further refining their attributes and scoring system. They looked at the same magazines as in the 1984 study and coded attributes as favorable (+1), less favorable (-1),
and neutral (0). They concluded that coverage was balanced in this election (Moriarty & Popovich, 1991, p. 371). George Bush was portrayed as more cheerful, and Michael Dukakis had a more respectful camera angle (Moriarty & Popovich, 1991, p. 371).

Waldman and Devitt (1998) analyzed photographs for the 1996 election that appeared in the five highest circulating broadsheet newspapers in the country. They simplified Moriarty's coding system into five variables – expression, activity, interaction, background, and camera angle – and coded each as negative (-1), neutral (0), or positive (+1) (Waldman & Devitt, 1998, p. 306). By averaging the scores for each category, the photograph was assigned a numerical value. Waldman and Devitt (1998) found that Bill Clinton scored higher than Dole for every measure except for background. They also noted the scores co-varied over time – when one candidate's overall photographic score rose, the other score also rose. When one candidate's photographic score fell, the other's fell, too (Waldman & Devitt, 1998, p. 306).

Miller (2005) developed a coding scale based on the work of Waldman and Devitt (1998) and Moriarty and her co-researchers. Miller trained coders to analyze images of John Kerry and George Bush in *Time*, *U.S. News and World Report*, and *Newsweek* leading up to the 2004 presidential election. The images were coded as favorable, unfavorable, or neutral for each attribute. The attributes were grouped as part of the behavior index (posture, arm position, hand position, and facial expression), context index (setting, dress, and interaction), and perspective index (position on the page, size of the photograph, and camera angle). Miller (2005) reported that overall, the photographs published for each candidate were positive and that any attribute differences noted between candidates had statistically weak associations (pp. v-vi).
Taking the image coding from the print world to the online world, Verser and Wicks (2006) developed attributes and a coding method to analyze the photographs on the campaign Web sites of George W. Bush and Al Gore during the 2000 presidential election. Unlike the point values in the methodology used by Moriarty and her co-researchers, Verser and Wicks coded for whether each attribute was favorable or unfavorable. Their analysis revealed the total number of favorable and unfavorable classifications for each attribute. Overall, they found that Gore with 502 images had significantly more images than Bush (67) on his Web site (Verser & Wicks, 2006, p. 187). In examining trends among these attributes, Verser and Wicks concluded that the images on the sites were meant to counteract negative portrayals/perceptions of the candidates from other media. For example, George Bush was shown in formal attire and in leadership roles. Al Gore, conversely, was shown in casual dress and was shown relating to the “common” person.
Chapter 3

Statement of the Problem

As evidenced by the small number of studies in the literature review that address view book imagery, there is an opportunity to expand this field of research. In addition, there exists the potential to expand the use of the coding methodology employed only thus far in presidential campaign studies to other fields of inquiry. It is the intersection of these two opportunities that resulted in the thesis question.

3.1 Thesis Question

The published research on view books and on photographic images in political campaigns forms the basis for this study. Specifically, the research question posed in the current study is the following

What visual messages are being conveyed by photographic images in college view books?

To answer this question, the following pages test two hypotheses. The first hypothesis seeks to confirm or reject Klassen's 2001 analysis of view book images.

\[ H_1: \] The visual images of first tier schools will display more images of the type identified by the Klassen (2001) study.
The second hypothesis extends the analysis using the attribute clusters developed by Verser and Wicks in their 2006 study.

H2: The visual images of first tier schools will be more favorably rated than the images of fourth tier schools.

To test the first hypothesis, sample view books were acquired from first and fourth tier schools as rated by U.S. News and World Report. The images in the groups of view books were compared using the methodology developed by Klassen in his 2001 study.

To test the second hypothesis, selected view books from U.S. News and World Report first-tier schools were analyzed using the image rating methodology, adapted from the methodology for political candidates used by Verser and Wicks (2006).

The reason the rankings from U.S. News and World Report were used was because this is a standard used by other researchers in order to compare and contrast institutions. First tier institutions are those that are rated the highest in the nation in terms of student and faculty scholarship, research, financial aid to students, and more. Fourth tier institutions are those that rate in the lowest in the nation according to these same factors.
3.2 Methodology

To test the hypotheses, view books appearing in the 2009 U.S. News and World Report rankings list were selected and requested.

On August 25, 2009, the 2009 U.S. News and World Report National Universities rankings were accessed at http://colleges.usnews.rankingsandreviews.com/best-colleges/national-universities-rankings. The national universities were defined as those that "offer a full range of undergraduate majors, plus master's and Ph.D. programs, and emphasize faculty research" (U.S. News and World Report, "How We Calculate Rankings").

Using a random number generator, five schools in the first tier were selected, as well as five schools in the fourth tier. The first tier national universities selected were: University of Delaware, The Pennsylvania State University, University of Wisconsin – Madison, University of Southern California, and Dartmouth. The fourth tier national universities selected were: Portland State University, Barry University (Miami Shores, Florida), East Carolina University, University of Missouri – St. Louis, and University of Louisiana – Layfayette.

An e-mail was sent to a staff member in each school's office of undergraduate admissions on August 25, 2009 asking for three copies of their printed, undergraduate view books to be sent to the researcher's home address. On September 15, 2009, a follow-up e-mail was sent to the schools from which the researcher had not received a view
book, again asking for three copies of their printed, undergraduate view book to be sent to the researcher's home address.

On September 25, 2009, the researcher conducted an inventory of the view books received and went online to the 2009 *U.S. News and World Report* National University rankings to randomly select two additional first tier institutions and one additional fourth tier school from which to request view books. The first tier schools selected were Georgetown University and Cornell University. The fourth tier school selected was Idaho State University. The researcher e-mailed the undergraduate admission offices of the schools and requested three copies of their printed, undergraduate view book be sent to her home address.

Within two weeks, the requested view books had been received. The researcher had the needed five, first tier and five, fourth tier view books to analyze. The final list of first tier schools consisted of The Pennsylvania State University, University of Wisconsin – Madison, University of Delaware, Georgetown University, and Cornell University. The final list of fourth tier schools consisted of Portland State University, East Carolina University, University of Missouri – St. Louis, University of Louisiana – Layfayette, and Idaho State University.

In order to reduce coder bias based on institution name and accompanying text, the researcher individually scanned all view book photographs that were larger than 1 inch by 1 inch (1 square inch area) into a computer and saved the photographs. The photograph files were each titled with a unique number that did not correspond to first tier or fourth tier status. A total of 393 photos were scanned and saved from the view books.
Once all of the photographs were scanned into the computer, the researcher created two sets of contact sheets. Each contact sheet consisted of the photos in color and their corresponding file name (which was a number) underneath them. One of the contact sheets was used for the Klassen (2001)-based analysis and the other was for the Verser Wicks (2006)-based analysis. Figures 1-3 in Appendix A are sample pages of the contact sheets given to the coders.

The researcher simultaneously developed the coding scales for the photographs. First, the researcher reviewed the categories of photographs used in the Klassen (2001) study. The only change made was combining the categories "faculty" with "faculty profiles" and "students" with "student profiles." This was done because the word "profile" could indicate a text component; yet, in the present study, the photographs were separated from the text and presented alone. The categories for the Klassen (2001) portion of the study were: students doing artistic activities; students attending class (both inside and outside); cultural/arts events and activities (theater, orchestra, etc.); the city in or next to which the university is located; students involved in internships; faculty member/professor; science labs; students studying inside; teachers working one-on-one or in small groups with students; technology other than personal computers; outdoor beauty; students and others attending graduation ceremonies; students playing intramural sports; students watching intervarsity sports; fairs, carnivals, and parades; students exercising in fitness centers; students involved in outdoor recreation; students; students involved with university radio, TV, newspaper; students working with small children; students studying outside; students playing in the student union; and alumni.
For the Verser Wicks (2006)-based analysis, the researcher studied the attributes used and adapted them accordingly for the study. The attribute categories were chosen if they could be applied to multiple subjects (since many of Verser and Wicks's categories related to just one presidential candidate), if they were not presidential campaign-specific, and if they could be discerned without advanced photographic training (as Verser and Wicks's scale included evaluations of various points of photographic technical value). In addition, Verser and Wicks's descriptions of favorable and unfavorable presentation for the attributes were adapted, if needed, to broaden the description beyond a presidential campaign setting.

The attributes and favorable and unfavorable descriptions are in Table 3.1.

Table 3.1: The attributes used in the study with their corresponding favorable and unfavorable descriptions

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Favorable</th>
<th>Unfavorable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
<td>Demonstrates dynamic behavior, such as speaking or walking/moving</td>
<td>Demonstrates passive or lethargic activity such as listening, reading, or dozing</td>
</tr>
<tr>
<td>Expression</td>
<td>Most subject(s) are cheerful or confident</td>
<td>Most subject(s) look unhappy, worried or tired</td>
</tr>
<tr>
<td>Seriousness</td>
<td>Serious</td>
<td>Images of playfulness</td>
</tr>
<tr>
<td>Dress</td>
<td>Attired in suit and tie</td>
<td>Less formal clothes</td>
</tr>
<tr>
<td>Eye Contact</td>
<td>Most are looking directly at camera or at others</td>
<td>Most are looking up, down, or with eyes closed</td>
</tr>
<tr>
<td>Time</td>
<td>Historical photos (do not look current)</td>
<td>Depicting current events or campus environment</td>
</tr>
<tr>
<td>Props</td>
<td>Mascot, logo, seal, college/university colors</td>
<td>No props</td>
</tr>
<tr>
<td>Setting</td>
<td>Classroom or lab or some place formal-looking</td>
<td>Informal settings, like a dorm room, cafeteria, outside</td>
</tr>
</tbody>
</table>
Once the coding attributes and categories were developed, the researcher created worksheets for the coders. A total of six coders were selected for the study — three for the Klassen (2001) analysis and three for Verser Wicks (2006)-based analysis. Coders recruited for this study were over 18 years of age and had no knowledge of what the study was about beyond this description on the coding worksheet: "This is for a study of view book photographs. The study will seek to compare the various elements of photographs in college and university view books." Coders were given two weeks to complete a practice worksheet that corresponded to their coding analysis for the actual study. The coders were given 10 photographs that were not part of the final study to analyze.

Once they had completed the practice portion, the researcher analyzed the results to determine the inter-rater reliability. In the Verser-Wicks condition, the coders rated photos identically. For the Klassen condition, most photographs were rated similarly. However, those that were not rated the same resulted from the coders leaving the answer blank or indicating multiple choices. Since assigning multiple categories or indicating uncertainty were not forbidden in the directions, the researcher decided to proceed with the coding device. This decision was selected because Klassen had indicated inter-rater agreement in his study with the same tool.

To prepare for the actual study, the researcher split the 393 total photographic images into three equal groups. She created three packets of 131 photographs each for the Klassen (2001) coding scheme and three packets with 131 photographs each for the

The packets were delivered to the coders either in person or by mail. The researcher followed up to confirm receipt with the coders. The coders were given two weeks to complete their analysis and to return the packet to the researcher. The coders were not asked to put their name or any identifying marks on the packets.

The researcher then tabulated the results, which are presented in the following chapter.
Chapter 4

Results

The results for the two parts of the study are presented in table format. A total of 393 photographic images were analyzed. These were all the photographic images in the view books that were larger than 1 inch by 1 inch (1 square inch). Of those, 229 were from first tier schools and 164 were from fourth tier schools.

4.1 Hypothesis 1

The first hypothesis posited that visual images of first tier schools would display more images of the type identified by Klassen. The results from the Klassen (2001) portion of the study therefore looked at which descriptive category was thought to best fit the photograph. Table 4.1 shows the overall number of images from the first and fourth tier schools in each category.

Table 4.1 Category and number of images of first and fourth tier schools in each category.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Images from First Tier Schools</th>
<th>Number of Images from Fourth Tier Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students doing artistic activities</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Students attending class (both inside and outside)</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Cultural/Arts events and activities (theater, orchestra, etc.)</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>The city in or next to which the university is located</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Students involved in internships</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Faculty member/professor</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Science labs</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Students studying inside</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Teachers working one-on-one or in small groups with students</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Technology other than personal computers</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Outdoor beauty</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>Students and others attending graduation ceremonies</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Students playing intramural sports</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Students watching intervarsity sports</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Fairs, carnivals, and parades</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Students exercising in fitness centers</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Students involved in outdoor recreation</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Students involved with university radio, TV, newspaper</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Students working with small children</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Students studying outside</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Students playing in the student union</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Alumni</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>221</strong>*</td>
<td><strong>156</strong>*</td>
</tr>
</tbody>
</table>

*The totals do not equal the total number of images from the respective tier, as coders left some answers blank or indicated multiple choices or uncertainty.

Calculations were then performed to determine the proportion of images in each category relative to the overall number of images from that tier. Calculations were
performed using the overall total of 221 images from first tier schools and 156 images from fourth tier schools.

A z test was performed to determine if the difference between the first tier and fourth tier proportions for each of the categories was significant. The confidence interval of 95 percent was used, as it is a generally accepted confidence level.

The results of the computations are given in Table 4.2. The categories that were found to exhibit a significant difference between first and fourth tier schools were faculty member/professor ($z = 3.492$) and students studying outside ($z = 2.042$).

Table 4.2 Category and proportion of images from first tier schools and fourth tier schools in each category

<table>
<thead>
<tr>
<th>Category</th>
<th>Proportion of Images from First Tier Schools</th>
<th>Proportion of Images from Fourth Tier Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students doing artistic activities</td>
<td>1.81%</td>
<td>2.56%</td>
</tr>
<tr>
<td>Students attending class (both inside and outside)</td>
<td>4.52%</td>
<td>1.92%</td>
</tr>
<tr>
<td>Cultural/Arts events and activities (theater, orchestra, etc.)</td>
<td>4.07%</td>
<td>5.77%</td>
</tr>
<tr>
<td>The city in or next to which the university is located</td>
<td>1.81%</td>
<td>5.13%</td>
</tr>
<tr>
<td>Students involved in internships</td>
<td>4.07%</td>
<td>1.92%</td>
</tr>
<tr>
<td>Faculty member/professor*</td>
<td>4.07%</td>
<td>14.10%</td>
</tr>
<tr>
<td>Science labs</td>
<td>3.62%</td>
<td>2.56%</td>
</tr>
<tr>
<td>Students studying inside</td>
<td>5.43%</td>
<td>3.21%</td>
</tr>
<tr>
<td>Teachers working one-on-one or in small groups with students</td>
<td>4.07%</td>
<td>5.77%</td>
</tr>
<tr>
<td>Technology other than personal computers</td>
<td>0.45%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Activity</td>
<td>Tier 1 (%)</td>
<td>Tier 4 (%)</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Outdoor beauty</td>
<td>16.74%</td>
<td>11.54%</td>
</tr>
<tr>
<td>Students and others attending graduation ceremonies</td>
<td>1.36%</td>
<td>1.28%</td>
</tr>
<tr>
<td>Students playing intramural sports</td>
<td>0.90%</td>
<td>1.92%</td>
</tr>
<tr>
<td>Students watching intervarsity sports</td>
<td>3.17%</td>
<td>1.28%</td>
</tr>
<tr>
<td>Fairs, carnivals, and parades</td>
<td>1.36%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Students exercising in fitness centers</td>
<td>0.90%</td>
<td>0.64%</td>
</tr>
<tr>
<td>Students involved in outdoor recreation</td>
<td>6.79%</td>
<td>10.90%</td>
</tr>
<tr>
<td>Students</td>
<td>25.34%</td>
<td>26.28%</td>
</tr>
<tr>
<td>Students involved with university radio, TV, newspaper</td>
<td>0.00%</td>
<td>0.64%</td>
</tr>
<tr>
<td>Students working with small children</td>
<td>2.26%</td>
<td>0.64%</td>
</tr>
<tr>
<td>Students studying outside**</td>
<td>4.07%</td>
<td>0.64%</td>
</tr>
<tr>
<td>Students playing in the student union</td>
<td>0.90%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Alumni</td>
<td>2.26%</td>
<td>1.28%</td>
</tr>
</tbody>
</table>

*Is significant at the 95 % confidence level, z = 3.492.
**Is significant at the 95 % confidence level, z = 2.042

4.2 Hypothesis 2

The second hypothesis posited that the images of first tier schools will be more favorably rated than the images of fourth tier schools. The results from the Verser Wicks (2006)-based analysis are given in the following Tables 4.4-4.11 and are broken out by attribute. Each table shows the number of photographs coded as displaying favorable and unfavorable aspects of the attribute as well as the percentage of unfavorable and favorable photographs for each tier for each attribute. The percentage for each tier was calculated by taking the number of either favorable or unfavorable images and dividing that by the total number of favorable and unfavorable images.
A z-test was performed to determine if the difference between the first and fourth tiers for each attribute was significant. The confidence interval of 95 percent was used, as it is a generally accepted confidence level. The categories found to exhibit significance were expression ($z = 2.058$), color ($z = 2.124$), props ($z = 2.106$), and time ($z = 2.32$).

Table 4.3 Expression in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of photographs in which most subjects are cheerful or confident</td>
<td>163</td>
<td>109</td>
</tr>
<tr>
<td>Number of photographs in which most subjects look unhappy, worried or tired</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Percentage of favorable photos*</td>
<td>77.25%</td>
<td>66.70%</td>
</tr>
<tr>
<td>Percentage of unfavorable photos*</td>
<td>22.75%</td>
<td>32.30%</td>
</tr>
</tbody>
</table>

*Difference between first and fourth tier is significant at 95% confidence interval ($z = 2.058$).

Table 4.4 Activity in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of photographs that demonstrate dynamic behavior, such as speaking or walking/moving</td>
<td>105</td>
<td>69</td>
</tr>
<tr>
<td>Number of photographs in that demonstrate passive or lethargic activity such as listing, reading or dozing</td>
<td>113</td>
<td>95</td>
</tr>
<tr>
<td>Percentage of favorable photos</td>
<td>48.17%</td>
<td>42.07%</td>
</tr>
<tr>
<td>Percentage of unfavorable photos</td>
<td>51.83%</td>
<td>57.93%</td>
</tr>
</tbody>
</table>
Table 4.5 Color in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of photos that are full-color</td>
<td>211</td>
<td>132</td>
</tr>
<tr>
<td>Number of photographs that are</td>
<td></td>
<td></td>
</tr>
<tr>
<td>black and white or monochrome (one</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>color</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of favorable photos</td>
<td>95.05%</td>
<td>89.19%</td>
</tr>
<tr>
<td>Percentage of unfavorable photos *</td>
<td>4.95%</td>
<td>10.81%</td>
</tr>
</tbody>
</table>

*Difference between first and fourth tier is significant at 95% confidence interval (z = 2.124).

Table 4.6 Props in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of photographs featuring the</td>
<td>41</td>
<td>17</td>
</tr>
<tr>
<td>mascot, logo, seal, college/university colors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of photographs with no props</td>
<td>185</td>
<td>146</td>
</tr>
<tr>
<td>Percentage of favorable photos *</td>
<td>18.14%</td>
<td>10.43%</td>
</tr>
<tr>
<td>Percentage of unfavorable photos *</td>
<td>81.86%</td>
<td>89.57%</td>
</tr>
</tbody>
</table>

*Difference between first and fourth tier is significant at 95% confidence interval (z = 2.106).

Table 4.7 Seriousness in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of photographs that are</td>
<td>122</td>
<td>81</td>
</tr>
<tr>
<td>serious</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of photographs with feature</td>
<td>98</td>
<td>67</td>
</tr>
<tr>
<td>images of playfulness</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27
### Table 4.8 Setting in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of photographs featuring a classroom, lab or someplace formal-looking</td>
<td>75</td>
<td>59</td>
</tr>
<tr>
<td>Number of photographs with an informal setting, such as a dorm room, cafeteria or outside</td>
<td>126</td>
<td>93</td>
</tr>
<tr>
<td>Percentage of favorable photos</td>
<td>37.31%</td>
<td>38.82%</td>
</tr>
<tr>
<td>Percentage of unfavorable photos</td>
<td>62.69%</td>
<td>61.18%</td>
</tr>
</tbody>
</table>

### Table 4.9 Time in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of historical photographs (those that do not look current)</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>Number of photographs depicting current events or campus environment</td>
<td>199</td>
<td>128</td>
</tr>
<tr>
<td>Percentage of favorable photos *</td>
<td>12.33%</td>
<td>20.99%</td>
</tr>
<tr>
<td>Percentage of unfavorable photos *</td>
<td>87.67%</td>
<td>79.01%</td>
</tr>
</tbody>
</table>

*Difference between first and fourth tier is significant at 95% confidence interval (z = 2.32).

### Table 4.10 Eye contact in the photographs by tier, in number and percentage

<table>
<thead>
<tr>
<th></th>
<th>First Tier Photographs</th>
<th>Fourth Tier Photographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photographs where most are looking directly at the camera</td>
<td>60</td>
<td>45</td>
</tr>
<tr>
<td>Photographs where most are looking up, down or have their eyes closed</td>
<td>157</td>
<td>102</td>
</tr>
<tr>
<td>Percentage of favorable photos</td>
<td>27.65%</td>
<td>30.61%</td>
</tr>
<tr>
<td>Percentage of unfavorable photos</td>
<td>72.35%</td>
<td>69.39%</td>
</tr>
</tbody>
</table>

Table 4.11 Dress in the photographs by tier, in number and percentage

| Photographs where most are looking directly at the camera | 60 | 45 |
| Photographs where most are looking up, down or have their eyes closed | 157 | 102 |
| Percentage of favorable photos | 27.65% | 30.61% |
| Percentage of unfavorable photos | 72.35% | 69.39% |
Chapter 5

Discussion

5.1 Hypothesis 1

The first hypothesis posed in this study read as follows:

H₁: The visual images of first tier schools will display more images of the type identified by the Klassen (2001) study.

Klassen (2001) had identified 23 categories of images that he found differed in quantity between first tier and fourth tier universities. However, in the present study, only two categories of images showed a significant difference between first and fourth tier universities — faculty member/professor and students studying outside. In addition, the findings of the present study are the opposite of what Klassen (2001) found for those same categories. In this study, more faculty member/professor images were in the fourth tier schools and more photographs of students studying outside were in the first tier schools' view books. In Klassen’s study, he reported more faculty member/professor images in the first tier schools’ view books and more photographs of student studying outside in the fourth tier schools’ view books.

Since only two out of 23 categories showed a significant difference, there is probably not much difference in the categories of images shown in first tier and fourth tier view books. Overall, it appears that universities chose to show similar percentages of
images in each category, no matter the school's ranking or prestige. Categories of images shown and the ranking of the school do not appear to be related.

This finding contradicts the Klassen study. The current finding that more faculty member/professor photographs were in fourth tier view books may be the result of the lower ranked schools trying to put more emphasis on teachers in the time since Klassen conducted his study. Klassen found that faculty member/professor images were a key component of first tier university view books. The fourth tier schools may have noted the study and sought to increase the number of faculty member images in their view books in order to imitate the feeling of academics/prestige found in first tier school view books.

Examples of the faculty member/professor photograph in the fourth tier school view books are images 142-145 in Figure 3 in Appendix A. These photos were taken from the fourth tier-ranked Idaho State University. Most of the faculty member/professor photos featured an older-looking individual. They were typically shot in a portrait style, with only the faculty member visible, in a classroom or lab setting. Image 146 in Figure 3 in Appendix A is an example of the other type of faculty photo – an older, authoritative-looking person addressing or working with one or many students. A brief review of the images showed there was not much difference between first- and fourth-tier institutions in the style of these faculty member/professor photos – it was the quantity that was the significant difference in this study.

The quantity of first- versus fourth-tier institutions' photos of students studying outside was another significant difference. The present study's finding that more of these images in first tier view books could be the top-ranked institutions' way of imitating positive qualities of the fourth tier schools. Klassen noted that fourth tier institutions had
more images of students studying outside, which connoted casualness and showed off a bit of the campus. Over time, first tier institutions could have incorporated that element into their view books, in an attempt to appear a bit less formal.

A typical first tier view book image of students studying outside is photograph 211 in Figure 2 in Appendix A. This photograph comes from the first tier-ranked The Pennsylvania State University. These images were characterized by students laying or sitting on lush, green grass, with books, backpacks, and laptops nearby. The students are dressed in casual clothes – jeans, T-shirts, hooded sweatshirts – adding to the "informal" nature of the photograph. One can see why such an image would counteract the perceptions of formality that some have about top-ranked schools.

Overall, the results from this portion of the study do not support the hypothesis and cast some doubt on Klassen's (2001) findings. No significant differences were found, except for two categories – and those findings were the opposite of Klassen's (2001) results. There are several reasons why this could have occurred.

The first answer may simply be the changes that come with time. Perhaps the view books were more varied when Klassen conducted his study a decade ago. Now, however, with ever-increasing communication and information sharing, the schools may have learned well how to imitate successful qualities of others' view books. They may have moved from dissimilar to similar over time. This would imply that students are being exposed to the same types of images in view books regardless of the tier/ranking of the school. The scenery and school colors might have changed, but the overall theme of images stays the same from school to school.
Another explanation for the difference between Klassen (2001) and the present study's findings could be the different methodologies. Instead of Klassen's method of examining photographs while they are still in the view books (meaning that a coder could deduce a school's name and infer its ranking), the photos in the present study were scanned into a computer and printed for the coders, identified only by a number in order to control any name recognition bias. Furthermore, as an alternative to Klassen's method of the researcher and a partner examining the photos, the present study used independent coders who had no knowledge of the explicit purpose of the study. One could argue that these steps toward improving impartiality resulted in the different findings between the two studies. It would be interesting to obtain the same images that Klassen analyzed for his study and use the present methodology, to test whether methods made the difference.

This point about using independent coders has implications for the field of view book studies, in that many of the researchers did not use independent coders. Klassen (2001), Hartley and Morphew (2008), and Hite and Yearwood (2001) coded or categorized images themselves. They have not used coders who are ignorant of the study's hypothesis or additional literature in the field. Since the present study found no difference in view book images due to ranking when using this type of methodology, it casts some doubt on the validity of these previous researchers' findings. A researcher who is cognizant of the purpose of the study and the source of the images may certainly have a different opinion or evaluation of a photograph compared to an independent coder.

This also points to the need for the adoption of a more rigorous scientific methodology in the study of view book images. Many previous researchers, as mentioned, coded images themselves, used informal methodologies, and overwhelmingly
relied on qualitative comments. To strengthen findings, researchers need to explore other methods and to perform quantitative studies in order to build a firmer groundwork of data.

That is not to imply that the present study is without its limitations. As noted in the Results section, the coders expressed uncertainty for some photos or noted multiple categories they believed were applicable to some images. As a result, these images were not included in the overall count and percentage calculations. A future study should look at the category descriptions to see if they are accurate and universally understood by raters. Perhaps the descriptions could be improved or entirely new ones could be suggested, and these could influence future findings in the higher education field.

The present study also was limited by its sample and size. It was meant to be a randomly generated representation of first and fourth tier view books; however, differences do exist between schools' view books. The view books selected may have just happened to have more or less of some image categories than others. A sample size of five per tier is a small number, considering the more than 200 schools on the U.S. News and World Report list and U.S. universities in general. It is also possible that the exclusive focus on images without the context of the view book influenced the findings. Future studies should incorporate more view books for analysis in order to see if the same results occur beyond this small sample.

Another future area for research is to compare schools based on variables other than rankings. Many of previous studies (and the present one) have compared high to low ranking universities. But there are other variables that could be used, such as location, funding (state or private), presence of graduate degree programs, and more. The U.S.
News and World Report rankings are bestowed upon the universities by an outside source. Yet variables such as funding, location, and other variables make up the very fiber and character of the school and its attractiveness to potential students. These may prove to be better distinguishing factors than the rankings.

With expansion in mind, the study of view books could also be moved from the printed to the virtual world. Many schools now only offer electronic versions of their view books on their Web sites and students are forming impressions based on a school's Web presence. It would be informative to compare these electronic versions to each other, or even compare printed view books to electronic versions.

5.2 Hypothesis 2

The second hypothesis posed in this study was worded as follows:

H₂: The visual images of first tier schools will be more favorably rated than the images of fourth tier schools.

The present study used adapted coding of human attributes in photographs used by Verser and Wicks (2006) to study online presidential campaign photos. Overall in the present study, four of the nine categories (expression, activity, color, props, seriousness, setting, time, eye contact, and dress) showed a significant difference between first and fourth tier schools. Of that four, three showed significantly more favorable attributes in first tier view books, and one showed significantly more favorable attributes in fourth tier view books. The favorable attributes of expression, color, and props were found in significantly more photographs in first tier view books. The favorable attribute of time was found in significantly more fourth tier view books.
It appeared that more first tier university photographs featured cheerful, happy subjects. It is obvious that any school would display images of happy attendees in order to attract more prospective students, but it is interesting that there were significantly more in first tier institutions' view books. One might assume the students just appear happier at higher-ranked universities, due to the quality of education, scholarship, campus life, and other elements that figure into the rating. An alternative explanation is that high ranked schools have more money and time to spend on photography and smiling student models.

A typical smiling/happy student photo is image 210 in Figure 2 in Appendix A, which is from The Pennsylvania State University view book. The students are all looking at the camera with happy expressions. One can infer the students are happy at their school from this image. It could also be an example of a first tier school having money to spend on photography, as it appears to have elements of staging (mascot, diverse group of students, everyone is posed and smiling).

The finding that there were significantly more color photographs in first tier institution view books may be explained by the goal of schools to impress prospects with their view book. Color printing costs more than black and white/monochromatic printing. By using substantially more color images, first tier schools could be trying to convey a high value to impress potential students. Some examples of color photography from first tier view books are images 207 and 208 in Figure 2 in Appendix A. Notice the lush and colorful campus photos convey a sense of the natural beauty a student can experience on The Pennsylvania State University campus.

The first tier schools also used substantially more props (mascots, seal, school colors, etc.) in their view book photographs. This denotes school pride and spirit and
helps to convey the university's brand and traditions. This again can be seen as another attempt to impress prospective students and immerse them within a school's culture through a printed view book. It appears that these first tier schools do a better job of telling their stories through these visual icons. Fourth tier institutions do not make as much use of them, which could convey a lack of tradition or age (i.e. they have not been around long enough to firmly establish such icons of prestige). Image 210 in Figure 2 in Appendix A is an example of a prop used by a first-tier school – The Pennsylvania State University's Nittany Lion.

Another significant difference between first and fourth tier view books was that fourth tier view books had significantly more favorable images in the attribute of time. This finding can be interpreted in two ways. First, since the books had more historical (i.e., not current) images, they could be re-using photographs from old view books because they do not have the time or money to take new ones. It is also possible that the schools could purposely be using historical images to imply they are well-established. Students may look more favorably on a school that is several decades old, versus one that has been founded in the past 10 to 20 years. A venerable age implies credibility when it comes to learning and degrees, and the fourth tier institutions could be tapping into that association through historical images.

An example of an older-looking image from a fourth tier institution is photograph 125 in Figure 1 found in Appendix A, which is from Idaho State University's view book. The style of dress and quality of the photograph indicate that it may be from several years ago, compared to some of the crisp images from The Pennsylvania State University's view book in Figure 2.
Overall, though, the majority of categories showed no difference in favorable versus unfavorable attributes between first and fourth tier institutions. While this does not completely support the hypothesis, it does show that the Verser and Wicks (2006)-based methodology can be used to evaluate photographs beyond those in presidential campaigns. The fact that some differences were found shows there is potential to use this methodology to examine photographic subjects' attributes in college and university view books. As mentioned in the first hypothesis, the higher education field of study can use such additional coding schemes and methodologies to expand the field of inquiry and obtain quantifiable results.

As with the other part of this present study, however, the differences in findings using Verser and Wicks's (2006) coding schemes could have resulted from the view books used. The sample size was relatively small in relation to the overall number of view books, which means these results are not necessarily applicable to all view books. In addition, some coders left the attribute field blank or wrote "N/A" (not applicable) for some photographs. This could have occurred because the attribute was genuinely not applicable (it is hard to assign favorable or unfavorable eye contact when the photo is of a building, for example) or because the explanation was not sufficiently clear. Careful examination and testing of the explanations should occur if this methodology is used again. It would also be useful to review the photos to make sure the characteristics are discernable for the coders.

In addition to using more view books, another way to improve the study would be to use more coders. Three coders were used for this study, and each coded 131 images. It would be an improvement to have multiple coders reviewing the same images, in order to
establish inter-rater reliability. Verser and Wicks (2006) did this for their study involving presidential candidates, but there is no guarantee that the same inter-rater reliability translates to the higher education view book world.

Considering the present study, future areas of research could be to use the coding scale to compare view books from different regions and countries, those with and without graduate programs, and printed and virtual forms. As mentioned with the previous part of the study, there seems to be a tendency in the literature to compare schools based on ranking. However, that is not the only differentiator. By looking beyond the *U.S. News and World Report* rankings, we can expand our potential findings.

This study also illustrated that Verser and Wicks's (2006) coding methodology can be adapted beyond the presidential campaign sphere, offering potential for other fields of inquiry. The coding scheme could be used in the fields of gender studies, international studies, and more. As it is used in other areas of research, the tool can be tested and further strengthened through its interdisciplinary use.

Another avenue of inquiry is to see if there is any correlation between favorable/unfavorable attributes of a photograph in a view book and potential students' rating of that photograph. The ultimate purpose of a view book is to get students to attend the college or university. Yet much of the research in the field takes the students out of the equation and instead uses categorization or coding techniques for evaluation. It would be interesting to bring students back into the mix to determine if their positive or negative ratings of a photograph bore any similarity to the coding of that photograph. Perhaps we would find that an unfavorable "time" rating (which means current photos) would be highly valued by students than the favorable (indicating historical photos) rating would.
The introduction of the present study posed a question about what messages the images in the view books are sending. Reviewing the results of this study clearly indicates that there is little difference in the visual messages of first tier and fourth tier ranked schools view books. It appears to be the standard college fare — a blend of students, faculty members, activities, academics, and more. Indeed, "standard" appears to be the appropriate word here, as there was little variation in the percentages of images for each school.
Chapter 6

Conclusion

At the onset of this study, the researcher admits she had some pre-conceived notions about college and university view books.

Working in the higher education field and conducting focus groups among high school students, the researcher had seen how little effect *U.S. News and World Report* rankings had on students' decisions, juxtaposed with the students' interest in the photographs in view books. The students could comment on and analyze every aspect of a photograph – when they thought it was taken, if it was staged or not, if they thought the subjects looked "hot," etc.

This research project evolved as a more methodical way to delve into the students' comments to see what messages the photos were sending and if differences between high- and low-ranked schools really existed. When the results were analyzed, it appeared the anecdotal evidence the researcher had proved true – ranking does not make that much difference when it comes to the types of messages sent by photographs in view books. In addition, the students seemed to be so adept at analyzing the photographs because they are so standard – there were significant differences in the quantities of the photographs between the first and fourth tier schools, not noticeable differences in the qualities of the photographs.
Included in the discussion of these results was the idea to move the study of printed view books and admission materials to the online world – a topic not found in current literature. While collecting and analyzing printed materials is easy, ever-changing Web sites mean that results can differ based on the day, or even hour, that the images are collected.

It is unwise to ignore the study of higher education materials online. The researcher recalls attending a college fair in fall 2008 in order to collect sample view books and admission packets for work purposes. Among the schools there, several had no materials except a printed image of their mascot with a Web address to visit for all of their admission materials. But what about this move online? Students might be comfortable with reviewing view book information online, but what about their parents? Or what about students in high schools who do not have access to technology at home or in the classroom? If the view books move online, how are they to receive information about potential colleges and universities?

This "digital divide" between parents and students and between students with and without access to technology is something that we, as higher education researchers, should not ignore.
References


Appendix A

Figure 1: Sample contact sheet given to coders, featuring images from Idaho State University
Figure 2: Sample contact sheet given to coders, featuring images from Pennsylvania State University
Figure 3: Sample contact sheet given to coders, featuring images from Idaho State University