CAPTURED IMAGES: A SEMIOTIC ANALYSIS OF EARLY 20TH CENTURY AMERICAN SCHOOLS

by

HEATHER C. CASWELL

B.S., Kansas State University, 2002
M.S., Kansas State University, 2007

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

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Department of Curriculum and Instruction
College of Education

KANSAS STATE UNIVERSITY
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Abstract

This study investigates visual representation of three perspectives: the context of school, the pedagogy, and the teacher-student relationships when viewing photographs taken during the first half of the 20th Century of American Schools. Grounded in the understanding of visual culture, this image-based study utilized photographs as a rich source of data.

The photographs collected for this study were taken between 1900 -1959 in American schools and were categorized by the Library of Congress as still images of classrooms in the United States. The Library of Congress collection was utilized to provide reliable categorized and documented images of schooling. The collection included 1,812 photographs archived in the Library of Congress Prints and Photographs collections specifically labeled as *Classrooms United States;* the non-digitized Frances Benjamin Johnston Photograph Collection of United States Indian School; and, *Look* Magazine Teacher Issue Charlotte Brooks negatives collection. A three-layered analysis utilized an initial layer of analysis placing each of the photographs into four predetermined categories: Time Period (1900-1950's), Urban-Rural, Wealth-Poverty, Active-Passive environment. The placement of each photograph into the above continua provided evidence of the balance of visual elements within the data collection. Seven themes emerged through an open-coding process within the second layer of analysis when each photograph was coded using a specific perspective: context, pedagogy, and teacher-student relationship. As themes were extracted, a third layer of analysis utilized a semiotic approach to identifying over 20 cultural icons representational of schooling within the photograph. Implications for further research are provided.

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Approved by:

Major Professor
Dr. F. Todd Goodson

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From an early age, I can recall living in a visual environment that honored the lens of awareness and questioning. My childhood environment allowed for time, attention, and value to be placed on the awareness of the world around me and to take time to absorb all seen and unseen attributes that made up the world that surrounded me. From this awareness and observation came questions. These questions were honored and valued. For this I thank, my parents, Dr. David and Janet Hagstrum for providing me with a unique lens of awareness and questioning.

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Doctoral Programs, I had the opportunity to be impacted by individuals who model learning as an intellectual and a personal growth process.

Nine years ago, just when I thought I had it all figured out (the answer to an inquiry or a drawn conclusion), an individual appeared to pose yet another question or perspective to consider. It was this individual that prompted me to feel comfortable in unknown experiences, as it is these experiences that give us new and different lens and perspectives. And most importantly, to trust myself within these experiences. For this I thank, my advisor, Dr. F. Todd Goodson for the lens of confidence as I continue to question the world around me through yet one more perspective.

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Dedication

This is dedicated to those who observe, question, imagine, and choose to view their world through multiple, unique lenses and perspectives.

Chapter 1 - Introduction

Background of Study

Historically, within American schools, photographs have been used to document chronological and developmental stages of educational and personal progression. As students of the American school system, we typically remember dressing up in our best clothes, waiting in line for the annual head and shoulders portrait. Could I stand the embarrassment of the goofy expression on my face as the photographer angles my head, asks for me to move in horizontal and vertical degrees until he/she says to "Hold that pose."? We probably also remember standing with our classmates as the photographer positions students by gender and/or height, and the teacher stands proudly behind us. We can recall our anticipation, as the school photographs arrived in their studio envelopes. Would this be the picture I could live with? Finally, as high school students, we remember opening our new yearbooks and turning to the index to check for our name and pouring over each picture of us in the book.

When we think of school and pictures together, it is almost invariably one, if not more, of these scenarios. The use of images of school for other purposes, particularly the use of images as rich sources of data for better understanding those schools, is a relatively untapped area of scholarship. Mitchell and Weber's (1998), "Picture This! Class Line-ups, Vernacular Portraits and Lasting Impressions of School", is arguably the first instance of serious socio-cultural scholarship concerning schools using visual images for the primary source of data. This work engaged students and teachers in reflecting upon the impact school photographs have on their understanding of being schooled through school memories sparked from school portraits and how taking photographs of schooling impact teaching approaches. For example, when viewing a

prior school photograph, an interviewer asks students to reflect upon the particular school picture day.

Mitchell and Weber, concluded their study with a recommendation for the use of visual images in the research on all aspects of school and schooling. We need, they said, "to consider the ways in which photographers, as outsiders, might be seen to contribute to shaping the world of the insiders, teachers and students" (p. 197).

Consider for a moment how and why schools, communities, teachers, and students view photographed images of schooling. Historical societies, alumni associations, schools, and families have purposeful collections of documented moments of our American schools, whether these images are of academia, arts, or sports. There is a historical tradition in the presentation of ourselves in school photographs whether it be hanging these images of schooling in hallways of academic institutions or published in yearbooks and newspapers. Historically, then, academic institution photos have been a ritual or tradition. Recall for a moment a photograph of an academic institute's team sport, you will most likely visualize an iconic group pose where rows of teammates stand behind kneeling teammates demonstrating a traditional one-knee stance. Mitchell & Weber (1999) exemplified this humanistic habit of archiving,

> Photographs are something we just take for granted; they get taken, we look at them, we hide them away, or we display them. How often, however, do we look into them, or really consider them as either 'tangible images' of the past or as records of lost moments. Yet, photographs can play a very important role in framing our sense of the past and shaping the course of our future (p. 74).

How does this concept of documented moments impact the progress and development of our American schools? What are the visual messages evident through historical photographs of schooling?

A commonality among human beings in western society almost always includes schooling. Everyone goes to school. It is the law. What differs, are the individual experiences, climates, and emotions that are associated with each individual's school encounter. The French photographer, Elliot Erwitt said,

> To me, photography is an art of observation. It's about finding something interesting in an ordinary place . . . I've found it has little to do with the things you see and everything to do with the way you see them (as cited in Gross & Sharpiro, 2001, p.70).

Beyond the moment the camera shutter captures the image, a photograph becomes merely a viewer's interpretation. Therefore, depending on the individual, different messages are gained from a single photograph. Stanczak (2007) stated, "my composition certainly allowed for internal references to trigger various interpretations of the photograph" (p. 1). Images are a product of a human's experience, interpretation, and understanding of the world around her/him. The creator of an image and the viewer of an image can communicate two completely different messages, understandings, and conclusions. It is this subjectivity that allows for images to become less concrete and more abstract in understanding and interpretation.

As researchers, what is the potential of visual research in education? Pertaining to both the philosophical nature of education and the experiences of being schooled, "It is important to recognize the importance of socio-cultural and historical factors in shaping how different media are used and their (ever-shifting) status within particular cultural contexts" (Chandler, 2009, p.

4). Photographs naturally preserve the cultural context of being schooled in American schools. By reflecting on the first half of the 20th Century of American schooling, what new understanding can researchers gain from the archived images of being schooled? If we consider education as a political act, how can images of being schooled impact our understanding of how we are being educated—or schooled? German Philosopher Friedrich Nietzsche's understanding of how images impact our understanding and visual culture suggested, "Our eye finds it more comfortable to respond to a given stimulus by reproducing once more an image that it has produced many times before, instead of registering what is different and new in an impression" (as cited in Crary, 1990, p. 97). This study is about registering the new and different.

Overview of the Issue

As we entered the 21st Century, a shift occurred as American schools transitioned from using photographic images solely as educational documentation to using photographs as a communication tool within the educational process through reform and policy. In addition to traditional school portraits, within an educational climate, images of schooling are presented to teachers, students, parents, and members of the public through websites, newsletters, and informational booklets. These images are shared and selected with an intentional message to inform and persuade. In contrast, a viewer reading her/his own interpretations of the selected photograph uses her/his prior experiences, social perspectives, and experiences of being schooled. This discourse can create a potential problem as there becomes a struggle between the perceived notion of schooling and the role of this perception when reflecting on the past, living the present, and making the future of schooling within our American schools.

Within the field of semiotics, Daniel Chandler (2009), described this complexity by stating, "human experience is inherently multisensory, and every representation of experience is

subject to the constraints and affordances of the medium involved" (p. 3). Knowing this, we can reflect upon the absence of awareness or the subconscious factors that play a role within the messages and interpretations of images and photography.

Statement of the Problem

As previously suggested by Mitchell and Weber (1998), there is a need "to consider the ways in which photographers, as outsiders, might be seen to contribute to shaping the world of the insiders, teachers and students" (p. 197).

Currently, little research has focused on the evidence of semiotic elements present in images of schooling. Additionally, limited research has shed light on possible links between cultural interpretation of being schooled and how these elements are present throughout historically documented images of being schooled. This limited research can be seen as problematic, due to the nature of human beings' interpretations being determined by personal understanding and experiences. Berger stated,

> Seeing comes before words. The child looks and recognizes before it can speak, but there is also another sense in which seeing comes before words. It is seeing which establishes our place in the surrounding world; we explain the world with words, but words can never undo the fact that we are surrounded by it. The relation between what we see and what we know is never settled (as cited in Jenks, 1995, p. 1).

Educational research should further explore the influence of iconic elements exhibited in the historical images and photographs society archives as images of being schooled. More importantly, how do these icons in images define who we are as educators, students, and community members and our present and future roles in the schooling process? The exploration

of these thoughts could open dialogue surrounding how icons of school define and impact educational reform.

Purpose of the Study

By reflecting on what images can tell us about the curriculum, social control, and cultural ideology of American schooling, researchers can begin to investigate how historically established icons impact how we approach schooling, leading researchers to continue inquiring, "Whose reality 'stalks' the corridors and classrooms of American schools?" (Apple, 1979, p. 46). Additionally, discovering icons within historically archived images could contribute to "the argument . . . that schools covertly teach all those things that humanistic critics of schools so like to write and talk about . . . and that they do so because teachers, administrators, and other educators do not really know what they are doing" (p. 44).

These conversations have been a trend since the beginning of schooling. It is not uncommon to overhear conversations about American schooling begin with phrases such as "it used to be . . . ", "I remember when . . .", or " in the good old days . . .". It is important to question the ideology of these statements. To what exactly are these conversations referring? Is it the mere memory that has been preserved? Or is it a recalled reality? It is paramount that these "good old days" be visually explored using historically preserved images that have documented these moments of schooling. Consider, what do images from the first half of the 20th Century tell us about our evolution of pedagogical understandings?

From early publications, textual representation of the "good old days" has been recorded. In the 1884 publication, *Pedagogy*, Edwin Hewett discussed, how education differs from learning. Hewett suggested, "EDUCATION is the development of the fallacies, or germs of power, in man, and the training of them into harmonious actions in obedience to the laws of

reason and mortality" (p. 40). Reform has been an element of textual discussion from the early 1900's. As demonstrated in John Dewey's, 1915 publication, *Schools of To-morrow*, Dewey suggested, "reviewing some of the modern attempts at educational reform, we quite naturally find that emphasis has been put upon the curriculum" (p.61). And Oscar Corson's, 1918, *Our Public Schools*, addressed this issue of improvement of the schools. Corson stated,

> the destructive critic who finds no good in the public schools, as they now exist, usually insist that 'an educational revolution' is the only means by which they can be improved. To him there is nothing in their past history or present practice which is worth conserving or worthy of serious consideration (p. 20).

Corson continued emphasizing the need for evolution rather than a revolution. It is textual evidence such as these that lead to questioning the mere memories of "the good old days" in our schools. Further textual representation documents philosophical belief such as the 1929 Teachers College, Columbia University publication *The Teacher's Handbook* that posed questions about teaching methods and classroom management while answering these questions with textbook answers, "such subjects as reading, writing, and arithmetic which are used as tools in the study of other subjects" (Elsbree, Halsey, & Elsbree, p. 158). This textually demonstrated a "banking" approach to education. The 1955 publication of *Why Johnny Can't Read* (Flesch) argued that children are not reading but merely memorizing words through repetition. Through these historically documented textual representations a historical understanding of schooling is presented. But what could photographs of schooling taken during the same time period as these texts, reveal about the good old days?

Researchers have examined these philosophical similarities through textual analysis, but what further understanding could be gained from a semiotic analysis of the historically archived images of American schools?

Research Question

What can we learn about American schools, in the first half of the 20th Century, from the Library of Congress's archived still images?

Subsidiary Questions

What can we learn about:

a. the context of American schools during the first half of the 20th Century,
b. the pedagogy of American schools during the first half of the 20th Century, and
c. the teacher-student relationship in American schools during the first half of the 20th Century?

Procedural Question

What is the capacity of visual research in education?

Definition of Terms

American schools: refers to schooling offered in the physical boundaries of the United States as defined by the Library of Congress as "Classrooms United States" (pre-k, elementary, secondary, trade, adult, etc.).

still images: archived historical photographs taken between 1900 to late 1950's of classrooms and schooling.

Library of Congress Collection: photographs categorized and archived as still images of United States's classrooms. (These categorized images range from classrooms of early childhood through adult education, including vocational training.)

context: the circumstances and/or physical environment that form the classroom setting.

pedagogy: approaches or acts of teaching and learning within a school or classroom.

teacher-student relationship: the nature of an interaction between a teacher and a student. Both the student and the teacher exhibit a role within this interaction.

Significance of Study

Through an art-based research approach to analyzing visual representation, value is found in problem finding and less in the act of problem solving, as it is the act of problem finding that will move awareness to deeper levels of understanding. Therefore, through questioning established approaches, a new frame of reference—a new mode of thought—is acquired.

The process of isolated and semiotic analysis allows for a critical reflection upon biases, interpretations, and hidden messages purposefully or unconsciously delivered through the viewing of images.

Chandler (2009) addressed this human and semiotic interaction,

> Travelling is an unavoidable part of getting somewhere; it may even become a primary goal. Travelling by one particular method of transport rather than another is part of the experience. So too with writing rather than speaking, or using a word processor rather than a pen. In using any medium, to some extent we serve its 'purposes' as well as it serving ours. When we engage with media we both act and are acted upon, use and are used (p. 4).

The act of vision possesses what Breitmeyer (2010) referred to as the "blindness corporeal" suggesting that " tasks once thought to rely on hardwired physiological processes that are largely immune to cultural influences . . . no doubt exists in eras prior to our own, they potentially also belong to the larger cultural history of seeing and not seeing" (p. 8). Through

analyzing historically archived photographs of being schooled, researchers can begin to consider what we can learn about our past practices, based on what we know now about our current culture and educational practice, through a semiotic analysis. However, this is not a historical study of pedagogy and the history of school.

This analysis leads to further questioning such as: What stories do the photographs of our past American classrooms, teachers, and students tell? Do these stories represent/misrepresent our philosophical purposes of being schooled? More importantly, what impact does this representation/misrepresentation have on our educational reforms, our popular cultural understanding, and the future approaches to teaching and learning? Asking these questions opens dialogue between community members and educational leaders, allowing for more critical viewing and questioning of the images chosen to represent education.

Methodology

This study explored historically archived school photographs taken during the first half of the 20th Century (1900's -1950's) in American schools. As an image-based, visual cultural, semiotic study, I used a layered analysis using predetermined categories: Time Period (1900-1950's), Urban-Rural, Wealth-Poverty, Active-Passive environment. Images were placed in each of the above continuums; this analysis served as the starting point for theme extraction through an open-coded process. As themes were extracted, I found cultural icons representational of schooling in these photographs. (This will be developed in depth in Chapter 3.)

Limitations of the Study

Naturally, with elements of subjectivity, individual interpretation, and temporariness, researchers face challenges and limitations when working with visual data and visual representation. The purpose of this study was to investigate a deeper understanding of my

personal reflection on the first half of the 20th Century through archived photographs of schooling and how this reflective act can lead to deeper metacogntive awareness and understanding of visual data in education. Due to the nature of this study, borrowing from the social sciences and humanities, it was not meant to produce generalizable knowledge. As a semiotic investigation, this study did not rely on raters or triangulation of data. "Semiological studies focus on the image itself and there is thus little attention paid to the audiencing and little concern of reflexivity" (Rose, 2001, p. 99).

Due to the large number of archived school photographs, it was essential that this study use a diverse collection of images that represented a diverse range of schooling experiences within the first half of the 20th Century. The photographs collected for this study were taken between 1900-1959 in American schools and were categorized by the Library of Congress as still images of classrooms in the United States. Based on the limitations of archived images, the Library of Congress collection was utilized to provide reliable categorized and documented images of schooling. The collection held 1,812 school images. Within this data collection were the Library of Congress Prints and Photographs collections specifically labeled as *Classrooms United States* (275 digitized images and 116 non-digitized images), including Frances Benjamin Johnston Photograph Collection of United States Indian School; and, *Look* Magazine Teacher Issue Charlotte Brooks negatives collection (96 non-digitized contact sheets with 1,421 images).

Organization of the Study

Chapter 1 is an introduction of photographs and schooling, a statement of the problem, the purpose of the study, the significance of the study, definition of the terms, and organization of the study.

Chapter 2 provides a review of the literature and establishes a theoretical framework for the study.

Chapter 3 states the study's research questions and provides an overview of the methodology of the research design, data collection process, and an overview of the data analysis.

Chapter 4 includes a semiotic analysis of photographs of schooling in American schools in the first half of the 20th Century.

Chapter 5 presents the findings of the semiotic analysis including themes and icons revealed within the semiotic analysis process.

Chapter 6 summarizes the findings and discusses implications to visual research within education.

Chapter 2 - Literature Review

Introduction

The following is an overview of the theoretical framework of this research, the influence of educational historians' perspectives, critical theory, as well as a literature review of image-based research, and the role of images in both qualitative and semiotic research. Image-based methodologies are extensively reviewed in addition to the role of images specifically in educational research.

Theoretical Framework

Visual Culture

Visual culture is defined as what we see and visualize. Moisander & Valtonen (2006) considered a larger definition and approach to visual culture.

> Visual culture is concerned not only with visual images such as paintings, photographs and movies but also with various sorts of other visibilities, such as visible spatial arrangements and material artifacts that communicate through visual means. The meanings of visual images and visibilities should, therefore, be studied as keys to a fuller understanding of the culture in which they are embedded. Images should be analyzed and interpreted by relating them to the social and cultural arrangements in which they are produced (p. 85-86).

Visual culture is grounded in the theoretical understanding and a socio-historical visual culture that suggests "Looking, seeing, and knowing become intertwined" (Jenks, 1995, p. 1). Also taking into consideration Berger's understanding of ways of seeing,

> Seeing comes before words. The child looks and recognizes before it can speak but there is also another sense in which seeing comes before words. It is seeing which establishes our place in the surrounding world; we explain the world with words, but words can never undo the fact that we are surrounded by it. The relation between what we see and what we know is never settled (as cited in Jenks, 1995, p. 1).

Similar to Berger's understanding, Moisander & Valtonen (2006) have reflected upon the need for visual cultural studies in a contemporary consumer society. Therefore, suggesting

> not only images but all kinds of visible objects and arrangements, visibilities, carry meanings. And through the practices of visual representation, people are governed and they govern themselves. It is no surprise, therefore, that throughout history, visual representation has also been used by the political elites to construct particular sorts of realities and subjectivities for particular segments and classes of people. In early British anthropological photography, for example, natives were portrayed in ways that reified the relationship of superiority and inferiority endemic to colonialism (Harper, 2000: 728). Power and visibility are thus interconnected; what is displayed, what people see and how they see it is linked to and shaped by different forms and relations of power (p. 85).

Amir B. Marvasti (2004) in *Qualitative Research in Sociology* reviewed the role of visual culture in *Visual Sociology*. Marvasti provided an overview of visual culture suggesting that visual culture is unavoidable within our social life. Visual culture is an important attribute of our social life as it affects our humanistic interactions both consciously and subconsciously. "The point is that a general awareness of the visual aspects of one's culture has become an essential

criterion for full membership in modern societies" (p. 63). Marvasti provided a summary of visual data, types of visual analysis, and their role in visual sociology, qualitative, semiotics, and quantitative research methods.

Through this lens of visual culture, W. Mitchell's idea of the innocent eye (2005), reminds us that we never see things uncontaminated by imagination, purpose, or desire. Therefore, "seeing and understanding are not merely passive. To the contrary, the spectator is a condition of what is held within a work coming forth and, furthermore, that revaluation can effectively change the subject-matter it discloses" (Davey, 1999, p. 4). By understanding visual culture, we understand that "though it might be seen by the mind's eye, what we come to *see* in a work is not necessarily an object which is visually present" (p. 4). Grounded in hermeneutic epistemology, specifically hermeneutic aesthetics, Davey (1999) suggested

> art works [photographs] do not merely re-interpret and re-present subject-matters but extend and alter their being. It is the notion of subject-matter that hermeneutic thought gains an insight into how an art work can transcend the temporal restriction of its historical origin and affect the contemporary world (p. 4).

Through both a hermeneutic belief and an understanding of visual culture, the idea of "reflectivity" allows for research to gain further understanding of the relationship between visual practices and visual culture. "It is possible to forge a conscious recognition of the constructive relation between our visual practices and our visual culture" (Jenks, 1995, p. 11). Within visual culture, Heywood & Sandywell (1999) suggested there are four "levels" or "orders" of visual phenomena:

> 1.) the level of meaningful practice in the life-worlds of everyday life or the routine visual categories at work in organizing the structures of practical experience;
>
> 2.) the emergence of recent interpretative problematic (theoretical narrative which advocate different 'ways of seeing') with an empirical commitment to exploring the detailed sociology and politics of the visual order;
>
> 3.) the historical formation of the theoretical science and the role of the critical thought in reflecting upon the social construction of their problem and practice"; and,
>
> 4.) at a more meta-theoretical science and the role of critical discourses concerned to question and deconstruct the history and implementation of visually organized paradigm and the practices, institutions, and technologies (p. x).

Don Slater (1995) suggested that within the field of visual culture

> only properties of individual, discrete things are knowable and real because even classes of things and categories of behavior are not directly visible but are generalizations built on the observation of the regularity of events. Most crucially, the criterion of visibility places meaning and values on the side of subjectivity. . . (p. 220-221).

A study in the field of visual culture is exemplified in *Visuality and Identity,* the work of Shu-Mei Shih (2007). Shih suggested,

> To be historical in the study of visual culture means history on different scales, global, local, regional, interregional, and all other possible intermediaries in between and betwixt. But no matter how large or small the scale, particular manifestations of global capitalism at the contemporary historical conjuncture constitute the temporal matrix in which visual culture is situated. The specific temporal marking of this phase of global capitalism is in broad step with new developments in the formation of culture in its culminating turn to visuality. Stuart Hall has remarked how global mass culture is dominated by the image which can cross and recross linguistic frontiers effortlessly and rapidly (p. 8).

Visual culture research and analysis such as Adele Clarke (2005) *Situational Analysis: Mapping Visual Discourse*, emphasized how visual culture impacted the 20th Century through photograph and media. Suggesting it is important to consider how the ability to produce and reproduce visuals and images has impacted our visual culture as well as how we as researchers study visual culture. Clarke advised that cultural studies need to consider both the critical and empirical paradigms of visual cultural studies. "The critical paradigm focuses attention on the unequal relations between social strata, and analysis is informed by a vision of a more equitable society" (Chaplin cited in Clarke, 2005, p. 209). Whereas the empirical paradigm suggested, "whether or not we consciously *intend* to flesh out an image, our eyes/mind have been so trained as users/consumers of the visual that they tend to do it "for us"/"to us."" (Clarke, 2005, p. 209).

Influence of Critical Theory and Neo-Marxism

Joe Kincheloe and Peter McLaren (2000), addressed the reconceptualized critical theory suggesting, "ideological hegemony involves the cultural forms, the meanings, the rituals, and the

representations that produce consent to the status quo and individuals' particular places within it" (p. 283). Therefore, suggesting researchers to look beyond the simplistic representation of denomination to discover the "understanding of powers complicity in the constructions people make of the world and their role in it (Kincheloe, 1998)." (p. 283). Additionally, Kincheloe & McLaren addressed critical hermeneutical methods of interpretations suggesting, researchers "engage in the back-and-forth of studying parts in relations to the whole and the whole in relations to the parts. No final interpretation is sought in this context, as the activity of the circle proceeds with no need for closure" (p. 286).

Barry Gibson (2007) compared and contrasted critical theory and grounded theory while addressing the debate between Pierre Bourdieu (grounded theory) and Theador Adorno (critical theory). Gibson defined critical theory as having an overarching structure and distinctive purpose. "There is a desire, for example, to construct social theories that link explanation and criticism. Critical theory is explanatory in that it aims to provide, no matter how diverse, a comprehensive perspective of society" (p. 440). Phil Johnson & Joanne Duberley's (2000) publication *Understanding Management Research* explored the relationship of critical theory and management by suggesting,

> We can be against critical theory or for it, but, especially at the present historical juncture, we cannot be without it. Indeed qualitative research that frames its purpose in the context of critical theoretical concerns still produces, in our view, undeniably dangerous knowledge, the kind of information and insight that upsets institutions and threatens to overturn sovereign regimes of truth (p. 116).

Additionally, literature within critical management research suggested critical theory to plays an important role in research stating,

> theoretical positions that draw upon postmodernism and poststructuralism focus on the complex ways in which power is exercised within a network of discursive relations used by individuals to construct identities and subjectivities. Although different in their theoretical frame and focus, we argue that such critical theories are broadly united in their concern to explore material inequalities and in their desire to link critique to action. Seen as such, critical theory can generate arresting analyses, challenge orthodox understandings about management and open up new avenues for thought and advancing management knowledge (Kelemen & Rumens, 2008, p. 15).

Within critical theory, "Marxism has lent a unity to disparate critiques by bridging the gap between abstract philosophy and concrete instrumentality" (Trend, 1992, p. 10). For example, "Institutions like the schools and museum construct systems of meaning that install people in imaginary relations to the real situation in which they live. Identity becomes a fictional text upon which various forces exert influence" (p. 11). This is also exhibited in Roland Barthes's idea of cultural signs, demonstrating Hans Magnus Enzenberger's understanding that "media actually found ways of satisfying real (but often unconscious) desires" (p. 12).

Critically synthesizing elements of both the social sciences and the humanities, critical theory inculcates that knowledge and understanding is power. Understanding acts of oppression provide further understanding in efforts to change the cycle of the oppressive. With this, comes an awareness and understanding that schooling is a political act. Michael Apple (1996) referred to this as the "Politics of Official Knowledge" meaning that education is greatly compromised by the politics of culture. "The curriculum is never simply a neutral assemblage of knowledge,

somehow appearing in the texts and classrooms of a nation. It is always part of a *selective tradition*, someone's selection, some group's vision of legitimate knowledge" (p. 22).

Apple (1979), reinforced this understanding by suggesting,

> our basic problems as educators and as political beings, then, is to begin to grapple with ways of understanding how the kind of cultural resources and symbols schools select and organize are dialectically related to the kinds of normative and conceptual consciousness 'required' by a stratified society (p. 2).

This is demonstrated in a study by Eugene F. Provenzo, Jr. and Andrea Ewart, when examining *Reader's Digest* articles focusing on issues in public education between 1945 and 1987. Provenzo & Ewart concluded, "the ultimate causes of these problems are only rarely examined in a larger, social, cultural, and political context" (Provenzo & Ewart, 1994, p. 96).

Lynn Nations Johnson and Gunilla Holm conducted a study *Education 1st!: Using Television to Promote the School* wherein, Johnson & Holm (1994) reviewed three cartoons and animated children's programs, three documentaries, four movies and fifteen sitcoms. Their purpose was to interpret the messages and portrayals of teachers, students, and schools. Johnson & Holms suggested that Education 1st! "would need to do less than change the face of television, allowing educational values to take precedence over the commercial interests of the entertainment industry" (p. 263).

Studies such as these lead to further discussion and understanding of the impact and influence of authority, politics, and ethics within the process of schooling. Giroux (1988) addressed the idea and understanding of authority,

> As a form of legitimating, this view of authority appeals to an established cultural traditions, whose practices and values appear beyond criticism. Authority, in this

> case, represents an idealized version of the American Dream reminiscent of nineteenth-century dominant culture in which "the tradition" becomes synonymous with hard work, industrial discipline, and cheerful obedience (Giroux, 1988, p. 71).

Additionally, strengthened by Johnson and Duberley (2000) suggesting, "critical theory warns us that 'what passes for "ordinary work" in professional-bureaucratic settings is a thickly layered texture of political struggles concerning power and authority, cultural negotiations over identity and social constructions of the problem at hand" (cited in Forrester, p.123). Addressing these dominate authorities are necessary, "If we want a creative citizenry that is capable of constituting itself as a democratic public sphere, then curriculum and school organizations must address the imaginary, and refrain from finding techniques to displace it by fear to the prevailing order" (Aronowitz & Giroux, 1985, p. 20). It is equally important to understand that "schools act as agents in the economic and cultural reproduction of an equal society. Nor is there any lack of evidence that a hidden curriculum in schools exist, one that tacitly attempts to teacher norms and values to students that are related to working in this unequal society" (Apple, 1982, p. 95).

Paulo Freire (1984) reflected upon how critical theory impacts pedagogy and the process of schooling, both historically and with current implementation. "There is no historical reality which is not human" (p. 125). The powerful influence of the teacher-student relationship, demonstrates how "Education thus becomes an act of depositing in which students are the depositories and the teacher is the depositor" (p. 57). Freire's concept of "banking" exemplified the understanding that classrooms and schools are socializing agents and "any curriculum designed to introduce positive change in the classrooms will fail unless such a proposal is rooted

in an understanding of those sociopolitical forces that strongly influence the very texture of day-to-day classroom pedagogical practices" (Giroux & Penna, 1988, p.28).

Further reflection of the impact and influence of curriculum and pedagogy is discussed by Giroux (2003) in *The Abandoned Generation: Democracy Beyond the Culture of Fear.* Giroux cautioned,

> The first casualty is a language of social and political responsibilities capable of defending those vital institutions that expand the rights, public goods, and service central to a meaningful democracy. This is especially true with respect to public schooling and the debate over the purpose of education, the role of teachers as critical intellectuals, the politics of the curriculum, and the centrality of pedagogy as a moral and political practice (p. 74).

This evaluation and reflection of the chosen curriculum can also be extended to the progressive movement and the work of Dewey who possibly acknowledged the limitation of the traditional schooling. "The traditional school had outlived its usefulness, because America was at the time changing rapidly from an agrarian culture and becoming an urban/industrial civilization requiring new kinds of intellectual capabilities" (Reitman, 1992, p. 37).

Carl Rogers and H. Jerome Freiberg (1994) discussed the politics of education and transforming schools through a person-centered perspective in their publication, *Freedom to Learn*. Using the term politics in a sociological manner, Rogers and Freiberg explored the how politics of traditional education in which decisions are made by those who hold the power, awarding grades, and opportunities for learning are provided by these powers. Referencing a process of education similar to that of Paulo Freire's concept of "banking" as the faculty are the "jug" who possess the knowledge and intellectual understanding thus allowing the students to

possess a passive being the "mug" in which the jug (educator) fills with this important knowledge. Therefore, communicating, "teachers know best what should be transmitted to the student" (p. 212). Rogers and Freiberg (1994) believed a better approach is that of a person-centered mode, rather than a traditional mode. The person-centered mode suggests that "leaders who facilitate others are themselves facilitated" (p. 212). In return, students set personal learning goals and achieve these through self-discipline and self-evaluation. A person-centered learning environment demonstrates a climate of growth and "learning tends to be deeper, proceeds at a more rapid rate, and is more pervasive in the life and behavior of the student than is learning acquired in the traditional classroom" (p. 213). Within this environment "each person regulates modes of feelings, thoughts, behavior, and values through her own self-discipline. So it is obvious that the growing, learning person is the politically powerful force in such education" (p. 214).

It is the ideas and literature reviewed thus far that serve as the theoretical framework and perspectives of schooling, both historical and critical, that became a foundation for this research study.

Influencing Perspectives of Schooling

Two perspectives on the process and organization of schooling become influential in anaylzing historically archived images of American schools. One one hand, there is the educational historian and administrative perspective, evident through the work of Ellwood Patterson Cubberley and Lawrence A. Cremin, who value the knowledge and understanding of historical context and the need for future educators and educators to be aware and able to apply this historical understanding to present practice. From this perspective, it is believed there is a

historical progression that is vital to understanding the implementation of education. There is a progress that should be understood and taken into account within our current practices.

On the other hand, there is Neo-Marxism and critical theory perspective evident in the work of Micheal Apple, Paulo Freire, and Henry Giroux. Through this perspective it is important to, not just have an understanding, but rather to examine—question—social and cultural knowledge through social sciences and humanities. The following is a literature review of these discussed influential perspectives.

The "Good Old Days": Historical Perspective of American Education

When analyzing historical images of schooling it is important to consider, "the tension between pride and criticism has been a central feature of American education in the twentieth century. It reflects the desire to make schools all things to everyone" (Lazerson, 1987, pp. 1-2). Value is contributed to understanding, within a historical context, of where we have been, educationally, and where we are now. Using historical context to reflect upon our current practices provides further opportunities for reflection and deepening our understanding. "Through such a study it is possible to give, better than by any other means, that vision of world progress which throws such a flood of light over all our educational efforts" (Cubberley, 1920, p. x).

Cubberley considered the importance of recording the history of education with the understanding of the context of setting and the great forces that shaped human progress.

> Still another important group of problems related to the readjustment of inherited school organization and practices, the better to meet the changed and changing conditions of national life—social, industrial, political, religious, economic,

> scientific—brought about by the industrial and social and scientific and political revolution which have taken place (Cubberley, 1920, p. 829).

Cubberley's work allows us to take into account, "thus it is impossible to study American education without recognizing the tension between pride and high expectations, on one hand, and intense criticism and disappointment, on the other" (Lazerson, 1987, p.2).

Lawrence Cremin emphasized the need for scholarly work specifically reflecting upon the history of education.

> We study history, not because in its absence there will not be any history, but rather because in its absences we shall have a corrupt history; we shall have the myths, the distortions, and the ideologies that flourish in the absences of critical scholarship. It is this, I think, that Socrates had in mind when he taught that the unexamined life is unfit to be lived by man. And it is this that propels those of us who study the past, even though we can never know it fully (Cremin cited in Anderson, 2001, p. 154).

Cubberley (1920) stated, "I tried, to prepare a history of the progress and practice and organization of education itself, and to give such a history its proper setting as a phase of the history of the development and spread of our Western civilization" (p. xii). Cubberley, and other education historians, believed that understanding the relationship between historical events and the context of schooling will impact our educational progress and implementation. Considering historical events such as immigration, allows us to reflect upon recorded historical information such as, "In 1908, the U.S. Immigration Commission listed 21 cities in which the percentage of children with foreign-born parents who were in school was greater than those with native-born parents" (Berrol, 1995, p. 42). Cubberley believed that knowing the educational setting and

historical context such as these, impacts how we approach our current educational issues such as English Language Learner, and the needs of schools with high minority populated classrooms.

During historical events such as the Great Depression, textual recordings of the progress of education have been recorded and reflected upon. "There was neither a new conception of the role of the schools nor a new institutional mechanism for delivery of schooling; . . . the schools, singly and collectively, were left to drift" (Moreo, 1996, p. 4). Leading us to consider Cremin's understanding that "in order to talk about the good life, we have to talk about the good society; and in order to talk about the good society, we have to talk about the kind of education that we bring that society into existence and sustain it" (Cremin, 1965, p. 2).

In early publications, the 20th Century education was presented as possessing ". . . many educational problems that face Americans as they move towards the twenty-first century" (Atkinson & Maleska, 1965, p. 110). Atkinson & Maleska referenced 20th Century educational problems such as, some states being richer than others, offering better quality schools, underprivileged children not recognizing their full potential, increasing number of college-bound students, and a shortage of teachers. Ravitch (1983) furthered this reasoning, "While some issues in American education waxed and waned, like interests in methods of instruction, and other issues flared and dissipated, like the fear of subversion, the problem of racial inequality in education grew in significance and with each passing year" (p. 114).

Cremin (1961) stated,

> However much progressive education had become the conventional wisdom of the fifties, there were still slum schools that could take profitable lessons from Jacob Riss, rural schools that had much to learn from the Country Life

> Commission, and colleges that had yet to discover that he natural curiosity of the young could be a magnificent propellant to learning (p. 354).

According to Cubberley and Cremin, it is essential to fully understand the historical context of education, considering where we have been, where we are now, and where we envision ourselves tomorrow. It is equally important to consider, "There is no neutral material of history. History is not a spectacle for us because it is our own living, our own violence and our own beliefs" (O'Neil cited in Giroux, 1981, p. 37). Therefore, leading Giroux to the conclusion that "both views have lead to a greater appreciation of the hermeneutic and political nature of public school pedagogy" (p. 38).

The Role of Images within Qualitative Research

The following is a review of literature focusing on visual research methodology and the function of photographs within art-based and qualitative research. Areas of deliberation within visual research include the role images play within research practices and limitations; the guiding theoretical framework of these practices; and, the approaches to analyzing visual data. Furthermore, examples of visual research are examined as well as the implications of visual research specifically in the area of education and American school reform.

It is vital to explore and understand the role images, more specifically photographs, play within research as well as the limitations of image-based research. When using images within social science research, it is important to consider as humans beings,

> we never look at just one thing; we are always looking at the relation between things and ourselves. Our vision is continually active, continually moving, continually holding things in a circle around itself, constituting what is present to us as we are (Berger, 1972, p. 9).

Therefore, according to Berger, interaction with an image is a reflection of our temporary individual interpretation of the visual presented in the current surrounding of understanding, experiences, and points of view present when the encounter occurs.

> In addition to this individual interpretation, it is also important to differentiate between communicated messages of visual representation and linguistic representation. The reciprocal nature of vision is more fundamental than that of spoken dialogue. And often dialogue is an attempt to verbalize this—an attempt to explain how, either metaphorically or literally, "you see things", and an attempt to discover how "he sees things" (p. 9).

Additionally, Paul Messaris's (1994) exploration of visual literacy discussed the idea of concrete representation when reflecting upon the interpretation of still images.

> Whether it is true or not that real-world visual processes may be applicable to the abstract aspect of pictures, common sense would seem to suggest that, when it comes to the interpretation of a picture's concrete content, no special interpretational skills should be required beyond those required by reality itself (p. 46).

Within the field of semiotics, Daniel Chandler (2009), referred to this as, "human experience is inherently multisensory, and every representation of experience is subject to the constraints and affordances of the medium involved" (p. 3). Additionally, when understanding semiotics within visual culture "semiotics cannot proceed on the basis signs mean different things to different people; on the contrary it depends on a cultural network that establishes the uniformity of responses to/readings of the signs" (Jenks, 1995, p. 15).

As linguistic communications are man-made so are visual images. "An image is a sight that has been recreated or reproduced" (Berger, 1972, p. 9). Images are a product of a human's experience, interpretation, and understanding of the world around self. The creator of an image and the viewer of an image can communicate two completely different messages, understandings, and conclusions. It is this subjectivity that allows for images to become less concrete and more abstract in understanding and interpretation. It is also important to apply the understanding of semiotics, considering:

> The everyday use of a medium by someone who knows how to use it typically passes unquestioned as unproblematic and "neutral": this is hardly surprising since media evolve as a means of accomplishing purposes in which they are usually intended to be incidental. And the more frequently and fluently a medium is used, the more "transparent" or "invisible" to its users it tends to become (Chandler, 2009, p. 3).

Knowing this, allows for reflection upon the absence of awareness or the subconscious factors that play a role within the messages and interpretations of images and photography. Narrowing our focus to the role of photography within image-based research, we understand that the similar perspectives apply for both the creator of the image as well as the viewer. "For photographs are not, as is often assumed, a mechanical record. Every time we look at a photograph, we are aware, however slightly, of the photographer selecting that sight from an infinity of other possible sights" (Berger, 1972, p. 10).

Whereas, if we reflect upon the messages communicated through the use of photographs, Wagner (1979) suggested we consider,

> If I were to make a photograph of you, one which showed you seated casually in a familiar chair, your legs crossed and your eyes looking clearly into the lens, would it be the "real you" I photographed? And if you were wearing the clothes you have on now, your hair just as it is, and your shoes as well. . . would that be an accurate picture of who and what you are? (p. 11).

The photographer's way of seeing impacts the selection and perspective of the subject being photographed. "Yet, although every image embodies a way of seeing, our perceptions or appreciation of an image depends also upon our own way of seeing" (Berger, 1972, p. 10). Wagner explained this reciprocal nature of visual representation and the state of interaction best:

> Through this hypothetical photographic encounter—one which captures some of what we do with cameras in everyday life—we can play at social science. In "capturing the world" we can test our ideas about each other against the photographs and the realities they represent. In "creating visual statements" we manifest our understanding of the interesting and important. Through photographs we increase our knowledge of each other while at the same time raise questions about how well we understand our own lives (1979, p. 12).

Therefore, as researchers, it is essential that we understand the contextual factors, historical elements, and cultural influences that play a role in the crafting and viewing of images, more specifically photographs. "By expanding our awareness of the frame 'behind' the camera—the context in which the photographer is working—we refine our understanding of the social processes involved in making the images themselves" (p.12). Additionally, it is essential, "Social scientists appreciate that there is little we can see that is truly free from bias or personal

projection. The realism of this anxiety of course extends to photographic records as well as to the product of direct observation" (Collier & Collier, 1987, p. 10).

Philosophies and Methodologies of Image-Based Research

Historically, visual methods can be traced back to 6th Century B.C. Greece rooted in the idea of recorded thought (Harper, 2000). Later leading to English philosopher Bacon's idea of observable data based on knowledge that contributes to understanding and awareness of social problems—logical positivism. By the 19th Century, "the process of life itself could be recorded" (p. 718) although limited, as equipment was bulky, sight and sound were not simultaneously recordable—yet.

Therefore, according to Harper, a majority of literature encompassing visual research methodology involves an empirical approach (photographs document levels of social life); a phenomenological approach (photographs are an artistic expression from the photographer's perspective); and, a photo elicitation approach (participant perspective when viewing a series of photos). A majority of the visual research recorded thus far is based on the positivist epistemology as well as the epistemological assumption of subjectivity vs. objectivity empiricism. "When considering images, the line between subjectivist and objectivist—realist assumptions—that images capture something 'real' and that images are construction—is continually moving" (Stanczak, 2007, p. 7). In more recent image-based research, visual anthropology, semiotics, and iconography continue to be a foundation for future image-based research.

These theories and methodologies allow researchers to explore the relationship between images, photographs, and the purpose of art-based and/or qualitative research. "We have come to accept and even expect such visual representations as signifiers of complex calculations,

backed by a methodological rigor that is offered (perhaps more often required) as a staple within most social scientific curricula" (p. 2). Use of images and photographs as documentation have become commonplace within research efforts of anthropologists. "Admittedly, anthropology has carried the mantle of visual analysis throughout its disciplinary tenure" (p. 3). As Stanczak shared multiple examples of current image-based research, this determines that recent conversations about visual representation and the role of image-based research have begun to resurface. "Visual or image-based research is reemerging with significant untapped potential and vigor across a broader scope of disciplines" (p. 3). Stanczak also alluded that conversations need to continue about the role of images within research as he suggested, "what remains consistent is that images are not merely appendages to the research but rather inseparable components to learning about our social worlds" (p. 3). The politics of aesthetics examined by Marc Redfield (2003) additionally suggests, "In our literary and cultural criticism of our era, few notions cause more trouble, and more misunderstanding, than that of the "politics of aesthetics" (p. 1).

Through the historical lens of visual anthropologists, Collier & Collier (1987) believed that humans have become desensitized to the crafted skill of observation. Through our aide of specialists and technology, we take for granted the everyday observations that are necessary for survival within our environment. We look to meteorologists to determine what is the appropriate attire for the day. And we trust that a red traffic light means it is safe to cross oncoming traffic, as we know the driver of the vehicle will stop. How does this relate to research in social science?

"Photography is only a means to an end: holistic and accurate observations, for only human response can open the camera's eye to meaningful use in research" (Collier & Collier p.

5). They also believed that through visual and image-based research we can begin to observe our surroundings more critically. "Learning to see with visual accuracy, to see culture in all its complex details is therefore a challenge to the fieldworker whose training is literary rather than visual" (p. 5). Photographs serve multiple purposes within visual anthropology. As Collier & Collier discussed, photographs can be used to document social orientation, surveying of landscape, cultural inventory, as well as social interactions. Consequently, our methodological approach plays an essential role in reliability. When collecting visual data, it is suggested to "achieve systematic selectivity through a definition of how and in what order we will record the environment, behavior, and other cultural phenomena" (p. 162). Meaning, "these photographs must be made in a consistent manner that preserves the opportunity for comparative analysis" (p. 163).

According to Wendy Leeds-Hurwitz's (1993) publication, *Semiotics and Communication: Signs, Codes, Cultures*, semiotics is defined as "'the study of signs' points to signs as worthy of considerable attention" (p. 22). Leeds-Hurwitz used Eco's definition, therefore, defining signs as "'everything that, on the grounds of a previously established social convention, can be taken as something standing for something else' (eco, 1976, p. 16)." (p. 22). Arriving upon a meaning of a sign, Leeds-Hurwitz stated "Gronbeck stated that a particular form 'depends for its meaningfulness upon 1.) a stock of knowledge, possessed in common by both the communicator and the viewer, and upon 2.) a set of signs or markers which invoke that stock of knowledge' (1983, p. 241)." (p. 43). Leeds-Hurwitz, continued to define the use of codes within semiotics. Suggesting that "Codes are human inventions, designed to create order where chaos might otherwise reign. As such they are imperfect, suggestive rather than complete" (p. 66). Three types of codes are explored in Leeds-Hurwitz work. These types of codes consist of

logical, aesthetic, and social. Logical codes are codes used in science. Aesthetic codes pertain to art such as paintings, photography, literature, etc. Social codes are used by society. These codes consist of clothing, food, trademarks, etc.

Semiotics is a field of study involving many different "theoretical stances and methodological tools . . . [and] . . . those involved in semiotics include linguists, philosophers, psychologists, sociologists, anthropologists, literary, aesthetic and media theorists, psychoanalysts and educationalists" (Chandler, 2009, p. 2). Chandler referred to

> one of the broadest definitions is that of Umberto Eco, who states that "semiotics is concerned with everything that can be taken as a sign" (Eco 1976, 7). Semiotics involves the study not only of what we refer to as "signs" in everyday speech, but of anything which "stands for" something else (p.2).

This concept of semiotics can be extended to a broader study, such as,

> It is . . . possible to conceive of a science *which studies the role of signs as part of social life*. It would form part of social psychology, and hence of general psychology. We shall call it *semiology* (from the Greek semeîon, 'sign') (p. 5).

When analyzing visuals, Chandler (2009) referred to American philosopher Pierce's work, a series of types of signs were created. Building on Pierce's cognitive-interpretative understanding, semioticians have been trying to use his work to identify, categorize, and code signs.

In a contextual understanding,

> the term *text* usually refers to a message, which has been recorded in some way (e.g. writing, audio- and video-recording) so that it is physically independent of its sender or receiver. A text is an assemblage of signs (such as words, images,

> sounds and/or gestures) constructed (and interpreted) with reference to the conventions associated with a genre and in a particular medium of communication (p. 2).

Within the field of semiotics, it is understood that "even in the very flexible medium of language 'words fail us' in attempting to represent some experiences, and we have no way at all of representing smell or touch with conventional media" (p. 3).

Van Leeuwen (2001) stated semiotics analysis can be broken down into two layers. The first layer is the layer of *denotation*. This refers to what or who is being depicted within an image. The second, being the layer of *connotation*. Connotation refers to the idea and value expressed in the representation and the way in which it is being represented.

Within the layer of denotation, categorization plays a role in interpretation. Through textual captions or cultural understanding, viewers associate stereotypical categories with "objects" or "images" presented within an image. Therefore, multiple readers or readings of an image are encouraged to allow for multiple viewpoints and cultural perspectives to be represented. This is referred to as "Typification" (p. 95). The more stereotypes and categories the viewer associates to the image, the more likely the person/object within the image, is a representation of a "type". In addition to typification, "physiognomic stereotypes" (p. 96) occur, meaning that the person represented within an image is not seen as an individual but rather a represented "type".

Other factors that play a role in interpretation of an image are the arrangement of groups vs. individuals, the distancing of individuals from the camera, as well as any captions or surrounding text. When analyzing the second layer of meaning, connotation, it is understood that the denotative meaning is established in the reader's representation and interpretation. This

becomes the foundation for the second layer of meaning. Two elements are most commonly used in the development of connotation: poses and objects. Photographic elements such as framing, lighting, and distance can affect connotation. Van Leeuwen referred this to French semiotician Barthes's idea of photogenia. By documenting denotative signifiers and denotative signified elements within images along with both connotator and connotation elements, a researcher can begin to construct a possible narrative interpreting a specific image.

Iconography continues the semiotics understanding asking the question what do image represent and more importantly, what hidden meaning do images communicate. Simply, "What ideas and values do the people, places, and things represented in the images stand for?" (p. 92). Semiotics focuses on only the image itself, and treats cultural meanings as a given currency, which is shared by everyone who is at all acculturated to contemporary popular culture, and which can then be activated by the style and content of the image. Van Leeuwen further believed, iconography also pays attention to the context in which the image is produced and circulated, and to how and why cultural meanings and their visual expression come about historically.

Davis (2011) stated,

> the iconographic succession leads for our recognition of expressive form or formality, in the sense identified by formalism (what Erwin Panofsky called the pre-iconographical meaning of a configuration) to our recognition of pictorial motifs (what Panofsky called iconographical meaning) and onward to our recognition of pictorial symbols (what Panofsky called 'ultimate cultural meaning' or iconological content)" (p. 192).

Image-Based Research in Education

Image-based researchers such as Claudia Mitchell and Sandra Weber, have used photographs within educational setting through their work, "Picture This! Class Line-ups, Vernacular Portraits and Lasting Impressions of School" (1998). They examined the role of an outsider photographer to the memories of schooling as result from students revisiting and reflecting upon school portraits. The work of Michael Schratz and Ulrike Steiner-Loffler *Pupils Using Photographs in School Self-evaluation* (1998) examined how students used photographs to document and evaluate their school. These researchers exemplified how

> photographs are particularly good vehicles for such meanings, because they naturalize them. They can be thought of as just "finding" these meanings on the street, as it were, rather than "constructing" them. And they can also be thought of as not quite "spelling out" their message, not saying it "in so many words", so that that message can be construed as "read into it" by the viewer, rather than as communicated by a powerful social institution (Van Leeuwen, 2001, p. 97).

Little research within education has applied the understanding of iconology and semiotics to our educational climate. If we consider,

> how the camera can be used to explore and to analyze, so that we can use photography not only to *show* what we have already found out by some other means, but actually to extend our visual processes and to help us *find out more* about the nature of humanity and its multifaceted cultures (Collier & Collier, 1987, p. 12).

Through image-based research, researchers can begin to spark conversations among mainstream America linking the biases of education to our past experiences of being schooled, to

our social and cultural realities, and allowing questions and conversation to help us "find out more about the nature of humanity and its multifaceted cultures" (p. 12) within education.

Conclusion

Through a review of the literature in the influence of Visual Culture, Critical Theory, Neo-Marixism, Semiotics and the philosophies and methodologies of image-based research, a lens is provided for the researcher to apply a deeper understanding of image-based methodologies, semiotic analysis, iconology, as well as expanding upon the application of semiotics within educational research.

Chapter 3 - Methodology

Introduction

Gary Shank (1995) suggested educational researchers are at another crossroad. When reflecting on the attributes of qualitative research designs used in educational inquiry and social sciences, it is equally appropriate to reflect upon attributes of semiotic analysis used in the fields of anthropology, visual culture, communications, and humanities. Shank suggested, at this crossroad, it is necessary for educational researchers to consider the "notion that qualitative inquiry is a systematic empirical inquiry into meaning, and as such, is foundationally dependent upon the concepts and implications of semiotics" (Shank, 1995). A semiotic analysis allows educational researchers to further understand a semiotic reality. Shank defined a reality as, "an entity whose reality is determined by its status as being understood or even understandable by virtue of the fact that it brings certain things into relation to each other" (Shank, 1995).

For this purpose, this research study used an open-coding process borrowed from qualitative research design to categorize images, while using a semiotic analysis to discover icons within the documented image of schooling during the first half of the 20th Century of American schools.

Additionally, by utilizing a semiotic analysis to better understand our American schools through images, this study attributed to how image-based research and visual data can be further explored by educational researchers as well as contribute to "qualitative research and qualitative researchers . . . on the edge of a divergent explosion into inquiry, covering artistic, investigative, clinical, and many other directions" (Shank, 1995).

Researcher's Subjectivity Statement

As a researcher, I am influenced. There is no denying that I am influenced by the understanding that semiotics can play a role in both quantitative and qualitative research. For this study, I utilized qualitative methodology and semiotic analysis. "Semiotic theory gives researchers tools for thinking about communication and culture . . ." (p. 3). Bell suggests this is done in two ways. First, semiotics allows the researcher to take an outside-in perspective, "very different from the conventional qualitative research's "inside-out" approach" (p. 3). Second, semiotics recognizes that we live in a world of signs. Like Bell, I believe, "the semiotic researcher is not interested in attitudes, beliefs, and values per se. What is interesting to semiotic researchers is how these attitudes, beliefs, etc. cluster together into a particular cultural category, and how that cultural category fits into the culture in general" (2010, p. 12). I believe visual culture influences our conscious and unconscious interactions and understanding of the visual environment in which we live. Over time, school environments have become a culture we have all experienced; however, it is questionable whether a school environment equates a learning environment. I believe through visual semiotic research we gain further understanding about the visual context of the school environment and what does or does not promote authentic learning.

Research Design

Using an image-based research approach and the lens of visual culture and critical theory, this research study gained further understanding of the American school system through a semiotic analysis of still images using a multiple layered analysis. The initial layer of analysis consisted of unitizing data on a continuum of predetermined categories. Within the second layer

of open-coding analysis, emerging themes based on the predetermined category continuums were determined. From these emerging themes, a third layer of analysis consisted of semiotic aesthetic/social coding (icons), identified the denotations and the connotations represented in the data.

The design of this study allowed for the researcher to investigate a deeper understanding based on the researcher's semiotic analysis of how photographs documenting schooling can lead to deeper awareness of visual data in education. The design of this research study, borrowing from the social sciences and humanities, was not meant to be generalized or applied to multiple audiences, but rather provide one perspective of what we can learn from archived photographs documenting schooling in the first half of the 20th Century in American schools.

Research Questions

What can we learn about American schools, in the first half of the 20th Century, from the Library of Congress's archived still images? What can we learn about 1.) the context of American schools during the first half of the 20th Century from the archived still images in the Library of Congress collection (e.g., physical environment and objects within the physical surroundings); 2.) the pedagogy of American schools during the first half of the 20th Century (e.g., pedagogical approaches including, but not limited to, teacher-centered approach, student-centered, inquiry-based, banking system, etc.); and, 3.) the teacher-student relationship in American education during the first half of the 20th Century? (e.g., relationships include, but not limited to, authoritarian, authoritative, self-regulated, facilitator, etc.) Additionally, what is the capacity of visual research in education?

Data Collection

During the spring and summer of 2011, the researcher began an extensive search for a sample of images appropriate and reliable for a semiotic analysis. The process of finding an appropriate data sample, consisted of four phases: 1.) browsing historical society collections, online archive databases, and national libraries; 2.) extensive search within the Library of Congress archives and collections; 3.) applying for a Library of Congress Reader's Card; and, 4.) physically visiting the Library of Congress including both the Jefferson and the Madison buildings to collect and retrieve digital and non-digital images from the Library of Congress Prints and Photographs collection.

The first phase of this process allowed the researcher to investigate and browse online and on-site historically archived collections of images. For example, visiting county historical societies and browsing on-site archived images of schooling, field notes recorded the type of image and geographical information accompanying the archived image. Within this phase of data collection the researcher discovered that photographs of schooling within the first half of the 20th Century were limited in number within both online and county historical society archives and that the Library of Congress collection of photographs would provide a larger number of photographs taken in a diverse number of settings, timeframes, as well as by a variety of substantial professional photographers.

The initial search within the Prints and Photographs online collection displayed images categorized by the Library of Congress as *Classrooms United States* provided a few cartoons/drawings and extensive photographs. For the purpose of this study, the data collection excluded all cartoons/drawings, allowing photographs to be the focus for this semiotic analysis. In order to access all of the photographs that are part of the Library of Congress archived

collection, it was necessary to apply and receive a Library of Congress Reader's Card. This process consisted of an online and a face-to-face application process. The online component of this application process required the status of researcher, university affiliation, specific geographical information, and research interests. Once the online application process was submitted, a patron needed to be physically present at the Library of Congress to complete the final stages of the application process. This was achieved during a Spring of 2011 visit to Washington, D.C. Once the reader's card application was accepted, a Library of Congress Reader's Card allowed the researcher access to the Prints and Photographs Archive and to physically take photographs of the non-digitized images of the Library of Congress photograph collection.

Once the researcher registered and received the Library of Congress Reader's Card, the data collection process moved into the fourth phase. During this phase of the data collection, the researcher visited two different locations of the Library of Congress. First, the researcher browsed the reading room located in the Jefferson Building of the Library of Congress as well as inquired with the Library of Congress staff about any particular collections or publications that would present a collection of images of schooling from the 1900's to the late 1950's. Following this inquiry process, the researcher discovered that the general reading room did not possess any published or documented images of schooling.

The next step in the fourth phase of data collection was to visit the Prints and Photographs collection located in the Madison Building of the Library of Congress. Several general searches were conducted looking at images that were cataloged under keywords such as *teacher, students, schooling, education, learning, elementary schools, secondary schools*, etc. Following this extensive keyword search and dialogue with the Prints and Photograph staff, it

was decided that the Library of Congress collection, images within the entire Library of Congress collection, that were categorized as *Classrooms United States* would provide a diverse and large data collection ideal for a semiotic analysis. During this phase of data collection, part of the Library of Congress collection was accessible via an online database allowing the researcher to digitally download and code the images in the specific order in which the images appeared on the online database. Therefore, the first photograph that appeared under the *Classroom United State*s was also coded and downloaded as the first digitized image of this research data collection. (See Image 3.1.) Each image was saved in the appropriate order to reflect the Library of Congress online database.

Image 3.1 Example of Storage and Ordering of Digitized Images



The above photograph is the first cataloged photograph in the Library of Congress collection under the category *Classrooms United States*. The researcher electronically filed this first photograph as LOC1.

At this point, within the fourth phase of data collection, it was time to digitize the images that the Library of Congress had not digitized. Using white gloves and a non-flash digital

camera, the researcher digitized the remainder of the images needed to complete this data collection.

Due to the nature of this collection being all images within the Library of Congress collections and categorized by the Library of Congress as images of *Classrooms United States*, this collection provided a reliable categorized and historical collection of documented images of schooling. This collection was selected after consultation with a Library of Congress media specialist in addition to an extensive catalog search.

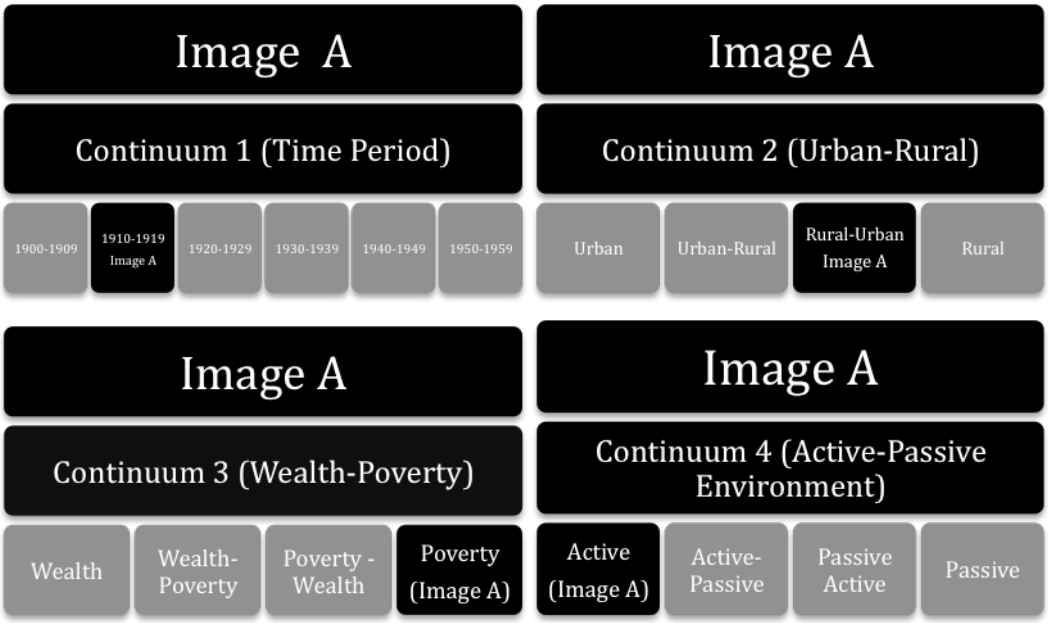
The data collection consisted of 1,812 school images. Within this data collection were the Library of Congress Prints and Photographs collections specifically categorized as *Classrooms United States;* the non-digitized Frances Benjamin Johnston Photograph Collection: United States Indian School; and *Look* Magazine Teacher Issue Charlotte Brooks negatives collection. Within this Library of Congress photograph collection, images documented classroom schooling between 1901 through 1959. This collection had been categorized and labeled as documenting classrooms in the United States and Teachers by the Library of Congress.

Data Analysis

Through a visual culture perspective and a critical theory lens, this research study used three layers of analysis. The first layer of analysis borrowed from a qualitative open-coding analysis process by placing each collected photograph systematically on a continuum for each of the four predetermined categories. These categories were 1.) time period (1900-1950's); 2.) rural - urban environment; 3.) wealth - poverty; and, 4.) active-passive environment. Therefore, one photograph was placed in each of the four categories listed above. Each continuum had 4 or 7 folders representing different increments of a specific continuum. (See Figure 3.1.) For clarity, each of the 1,812 images were quickly distributed into each of the four continua: Time Period

(1900-1950's), Urban - Rural, Wealth - Poverty, Active-Passive environment. Therefore, all images had an assigned placement in all four category continua. Before images were placed in each of the four category continua, the researcher identified at least three visuals within each image that displayed visual representation of the assigned placement within each category continuum. Creswell (2007) referred to this process as a constant comparative approach, "the researcher, attempts to 'saturate' the categories—look for instances that represent the category and to continue looking until the new information obtained does not further provide insight into the category" (p. 160).

Figure 3.1 First Layer of Data Analysis



Once images had been coded and categorized into appropriate categories, a second layer of open-coding analyzed each photograph, within the determined category from the first layer of analysis and coding each image in the perspective of 1.) context, 2.) pedagogy, and 3.) teacher-student relationship. Within the second layer of analysis, this secondary open-coding process revealed emerging themes.

By utilizing a computer software application, HyperRESEARCH, the researcher coded and retrieved images within each photograph being analyzed. Once themes had been identified, the third layer of analysis utilized a visual semiotic approach to identify specific icons that represented schooling in American schools. Within this third layer, a visual semiotic analysis identified denotations and connotations visible in the images that were connected to the identified themes.

The purpose of implementing the three layers of analysis is explained best by Shank (2001) in his analysis and description of the need to merge qualitative and semiotic methods within educational research. "If you are interested in juggling the theoretical and the personal, the formal and the particular, then perhaps a semiotic strategy is most appropriate" (p. 86). Utilizing a qualitative, open-coding approach together with semiotic analysis allowed the researcher to look "for patterns or codes that can go beyond your immediate setting" (p. 86).

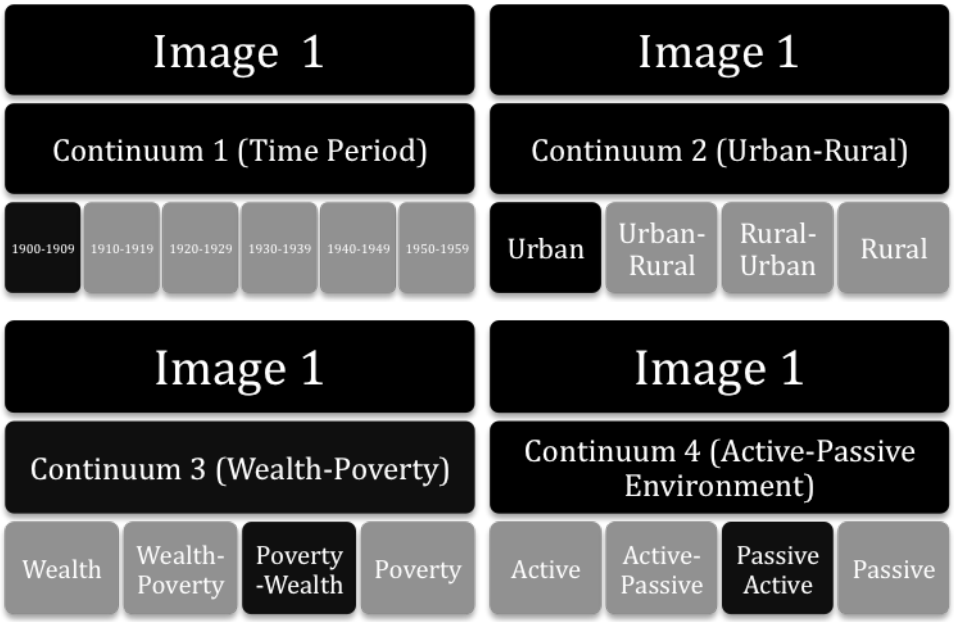
Preliminary Investigations

A preliminary investigation was conducted by taking four, randomly selected, images from the data collection through the first two layers of the analysis process. First, each of the four images were placed in all four pre-determined categories in the appropriate increment of the specific category continuums based on three visual representations evident within the individual photograph. Below is an example of one of the four, randomly selected, images used in the preliminary investigation and the specific assigned placement within each of the four category continuums.

Image 3.2 Image 1 of the Preliminary Investigation



Figure 3.2. Preliminary Investigation: Application of the First Layer of Analysis.



The following procedure was used when assigning an image on a continuum within the predetermined categories. (See Figure 3.2.) For example, when placing Image 1 (See Image 3.2.) into Continuum 1: Time Period, the researcher used the Library of Congress's documented time period recorded in the Library of Congress digital archive. For Continua 2 through 4, three visual elements had to be present in order to place a photograph within the specific continuum

criteria. For example, when placing Image 1 into Continuum 2: Urban-Rural, three visual elements needed to represent the placement of Urban (e.g., clothing, large size classroom, and access to multiple written materials). When assigning this image to Continuum 3: Wealth-Poverty, Image 1 was placed on the continuum at Wealth-Poverty. Therefore, the photograph exhibited at least two visual elements of poverty (e.g., large number of students, from immigrant families) and one visual element of wealth (e.g., age of students). Lastly, when placing Image 1 into the Continuum 4: Active-Passive, Image 1 was placed on the continuum at passive-active (e.g., evidence of "banking" (passive element), all students and teacher working from the same book (passive element), and students working independently as teacher looks on (active element)).

Conclusion

This research study involved the collection of data in four phases: online databases and on-site archives, Library of Congress archives and collections, application of Library of Congress Reader's Card, and physically retrieving digital and non-digital images at the Library of Congress. The analysis of the obtained collection from the Library of Congress Prints and Photograph Collection used a three layer analysis: open-coding into four continua of predetermined categories, open-coding into three predetermined perspectives to reveal emerging themes, and finally a semiotic analysis to discover icons.

Chapter 4 - Analysis

Introduction

This chapter provides the evidence and process involving three layers of analysis based on the Library of Congress photograph collection of still images of American schooling in the first half of the 20th Century. The initial layer of analysis placed photographs into each of the four continua of predetermined categories. For the second layer of analysis, the researcher open-coded photographs into three predetermined perspectives to reveal emerging themes. In the final layer, the researcher utilized the emerging themes to conduct a semiotic analysis to discover icons. The purpose of this study was to critically observe and investigate possible icons represented in photographs of schooling. The researcher specifically addressed the following research questions:

Research Question

What can we learn about American schools, in the first half of the 20th Century, from the Library of Congress's archived still images?

Subsidiary Questions

What can we learn about:

a. the context of American schools during the first half of the 20th Century,
b. the pedagogy of American schools during the first half of the 20th Century, and
c. the teacher-student relationship in American schools during the first half of the 20th Century?

Procedural Question

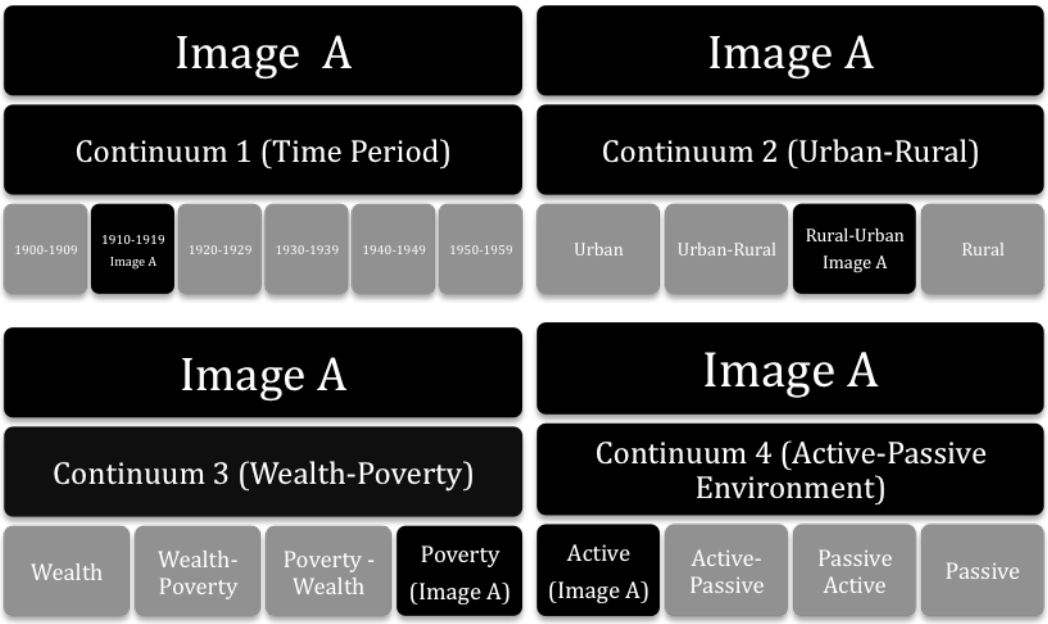
What is the capacity of visual research in education?

The researcher explored the analysis process in the chronological stages of the layered analysis process. The researcher began with the open-coding process borrowed from a qualitative research approach revealing how the photographs were distributed within the identified continua within Layer 1. The second layer of open-coding process was achieved by utilizing the HyperResearch software allowing themes to emerge. Prior to the third layer of analysis, each of the 1,812 images were critically viewed by the researcher at least seven times. Once the open-coding analysis processes were explored, the researcher revealed the semiotic analysis discussing the denotations and the connotations within the third layer of analysis. The researcher eluded to identified icons of schooling presented within the Library of Congress collection of photographs.

Contextual Continua: Layer 1 of Analysis

Due to the large number of archived school photographs, it was essential that this study use a diverse collection of images that represented a diverse range of schooling experiences within the first half of the 20th Century. The initial step in the analysis process assured that the photographs within the Library of Congress presented a balanced representation of the contextual criteria present in the American schooling in the first half of the 20th Century. Therefore, the four identified categories with individual continua were determined as 1.) Time Period (1900-1950's); 2.) Urban- Rural environment; 3.) Wealth - Poverty attributes; and, 4.) Active-Passive environment.

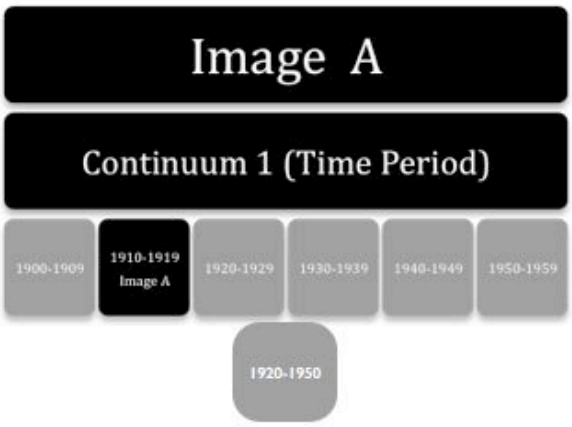
Figure 4.1 Example of Categories with Contextual Continua



To accomplish the first layer of analysis, the researcher assigned each photograph, within the data collection, to an appropriate place on the individual continua (See Figure 4.1.) within each of the four identified categories (Time Period, Urban - Rural, Wealth – Poverty, Active - Passive). This placement was done as the researcher visually identified objects (signs) within the images that possessed representation of criteria allowing it to fall within a designated place within each continuum. This categorizing revealed that the collection of photographs presented a visual representation within each of the categories. The *Look* magazine collection of 96 contact sheets contained 1,421 images. The *Look* collection provided photographs of one teacher, one classroom, and one school. Therefore, the researcher looked at the representation of images within each category continua with the *Look* magazine images (See Appendix A.) and without the *Look* magazine images. (See Appendix B.) With or without the *Look* images, all category continua were populated with images. No part of the continua lacked representation, allowing the researcher to continue with the second and third layer of analysis knowing that the data represented the criteria of the four identified category continua.

A modification to Continuum 1: Time Period was necessary due to the Library of Congress categorizing a few of the photographs within the data collection in a larger duration of time. Therefore, a 1920-1950 placement on the continuum was added to the Time Period category. (See Figure 4.2.)

Figure 4.2 Modifications to Continuum 1: Time Period



Again, the purpose of layer 1 was solely to provide a quick distribution of photographs into predetermined categories ensuring a representation of images within the data collection. After this quick distribution, the researcher was prepared for the second layer.

Open-Coding of Three Predetermined Perspectives: Layer 2 of Analysis

Within the second layer of analysis, the researcher used an open-coding software, HyperResearch, to code visual signs of each of the three predetermined perspectives, within each of the photographs within the Library of Congress collection. The predetermined perspectives were 1.) Context, 2.) Pedagogy, and 3.) Teacher-Student Relationship. These predetermined perspectives evolved from the subsidiary research questions. The following discusses the analysis process the researcher used to individually analyze each photograph using the lens of each of these predetermined perspectives.

For a systematic delivery of the researcher's second layer of analysis of the 1,812 photographs, the images providing examples in this chapter were randomly selected from each of the seven time period continua within the Time Period Category. Photographs selected within this category continuum also represented the other three continua (Urban - Rural, Wealth – Poverty, Active - Passive). However, the Time-Period continuum provided a balanced representation for images within the first half of the 20th Century. Following are examples of this open-coding process conducted on all 1,812 images. Although this research is not specifically a historical research, the data collection is of a historical nature and for this reason the examples of analysis demonstrated a balanced representation of the photographs of schooling from the early 1900's to the late 1950's. During the second layer of analysis, the researcher focused on one perspective in isolation using the HyperResearch software. Using the HyperResearch software, the researcher coded each photograph by inserting a blue box around the denotation representative of the specific perspective. The examples of analysis presented below demonstrate the contextual perspective of each of the time periods designated within the first layer of analysis.

Analysis though the Lens of the Perspective of Context

A perspective of context was defined by the researcher as any object or image within the photograph that triggered a mindful thought of being in school or a classroom. Contextual criteria consisted of concrete items within the environment of a classroom or school that communicated this was an environment specifically used for education. The contextual signs were specifically defined to physical attributes within an environment, but were not necessarily limited to the physical. The researcher examined each photograph using the visual lens of context when viewing the images presented in the Library of Congress photographs of

Classrooms in the United States. This close examination involved the researcher critically viewing each individual photograph for the purpose of coding specific images—physical objects—within the photograph that represented, displayed, or communicated criteria that would categorize the photograph as an image of school. When the researcher identified a specific image, within a photograph, the HyperResearch software was utilized to code the object within the photograph as a perspective of context. The number of codes within one photograph could be numerous, as the researcher critically viewed the photograph, coding when the criteria being viewed could be categorized as a contextual element of school.

Figure 4.3 Approach to Analyzing the Perspective of Context, 1900-1909



Figure 4.3 provides an example of how the researcher analyzed an image in the 1900-1909 continuum. The researcher coded visuals of context such as the chalkboard, student protractor, connected desks/chairs, wall bulletin boards, as well as paper materials and various

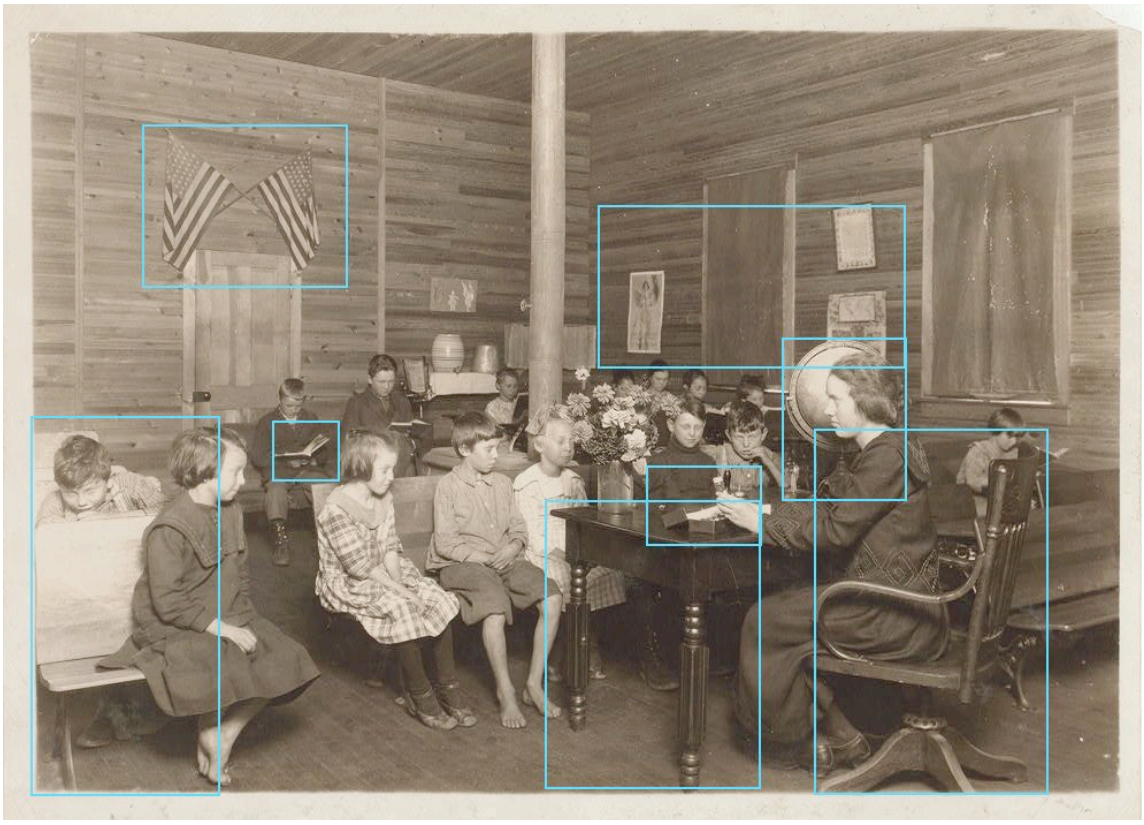
objects hanging on walls of this room to be visual contextual signs that triggered to the researcher that this environment was used for educational purposes.

Figure 4.4 Approach to Analyzing the Perspective of Context, 1910-1919



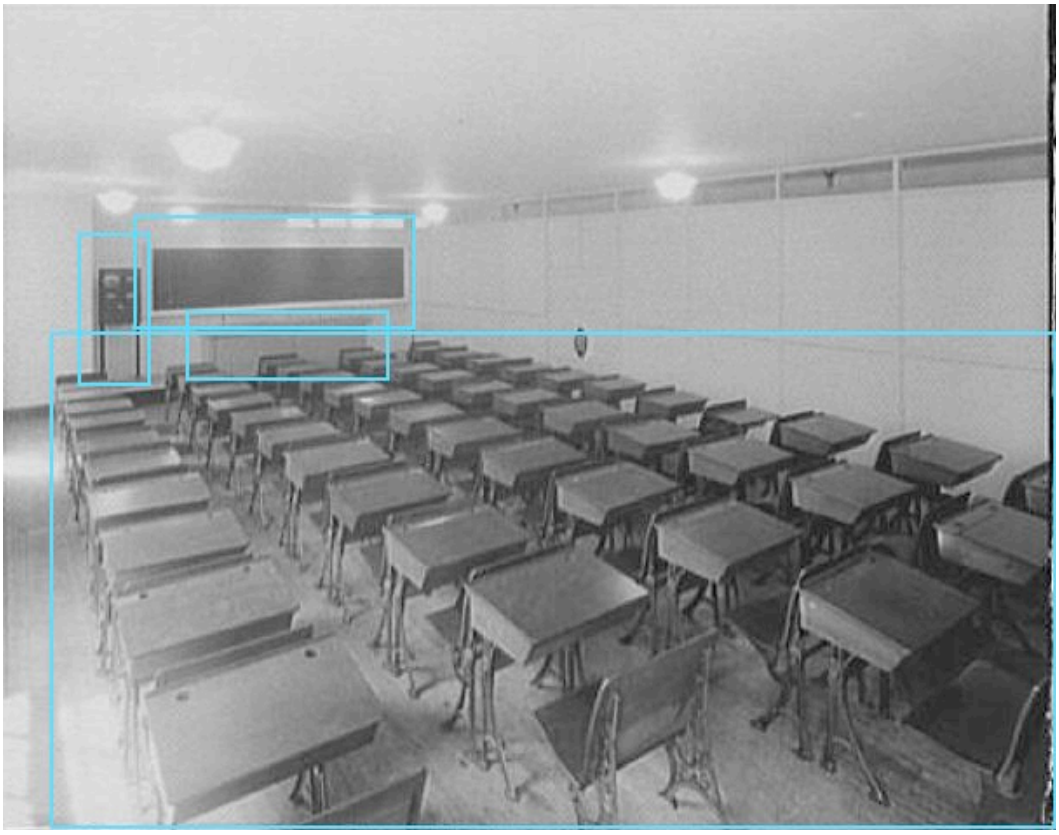
Figure 4.4 provides an example of how the researcher analyzed an image in the 1910-1919 continuum. The researcher coded visuals of context such as the wall charts, rows of wooden folding chairs, small chalkboard, table at the front of the room, display cases, and a small square demo table to be visual contextual signs that triggered to the researcher that this environment was used for educational purposes.

Figure 4.5 Approach to Analyzing the Perspective of Context, 1920-1929



The above Figure 4.5 provides an example of an analysis of an image in the 1920-1929 continuum. The researcher coded visuals of context such as the American flags, paper materials and various objects hanging on the wall, books being used by students, teacher's desk and chair, connecting student desk/chair, globe, and teacher materials on desk to be visual contextual signs that triggered to the researcher that this environment was used for educational purposes.

Figure 4.6 Approach to Analyzing the Perspective of Context, 1920-1950



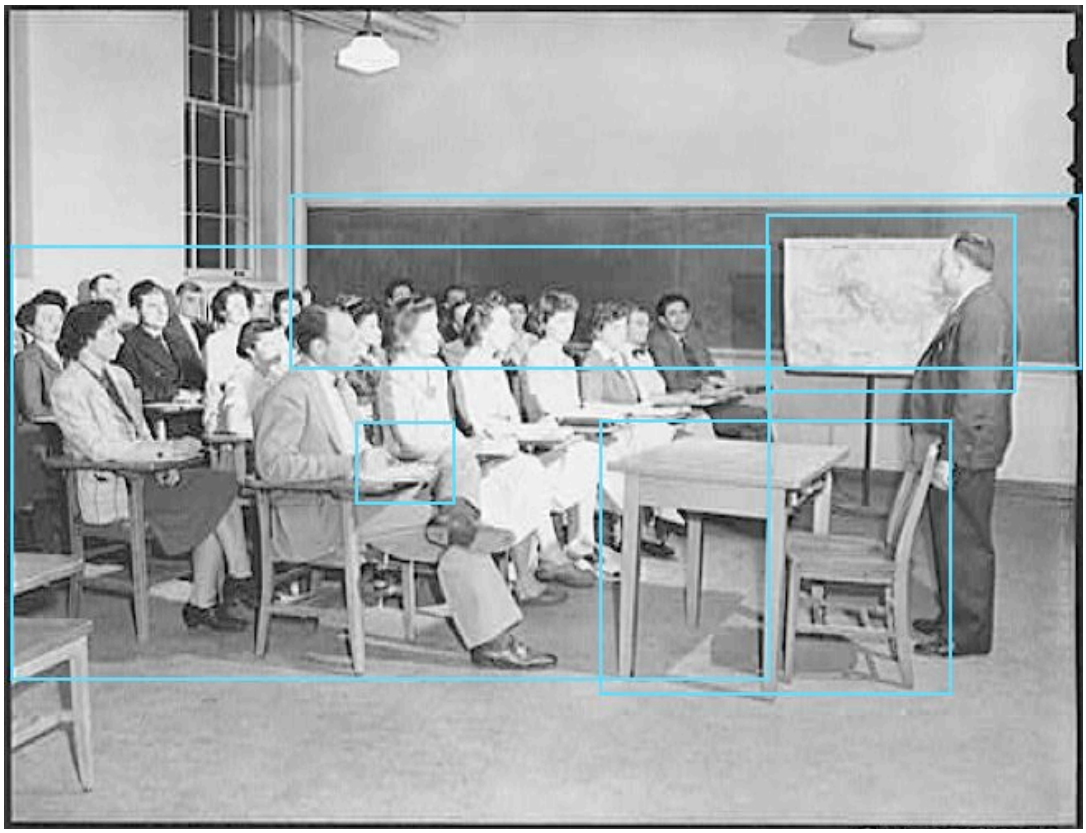
The above Figure 4.6 is an example of the analysis of images in the 1920-1950 continuum. The visual of context coded within this photograph were rows of connecting desk and chair sets, a chalkboard at the front of the room, an instructor's table or desk in front of the chalkboard, and a presentation board beside the chalkboard in front of the rows of desks. All of these were visual contextual signs that triggered to the researcher that this environment was used for the single purpose of instruction.

Figure 4.7 Approach to Analyzing the Perspective of Context, 1930-1939



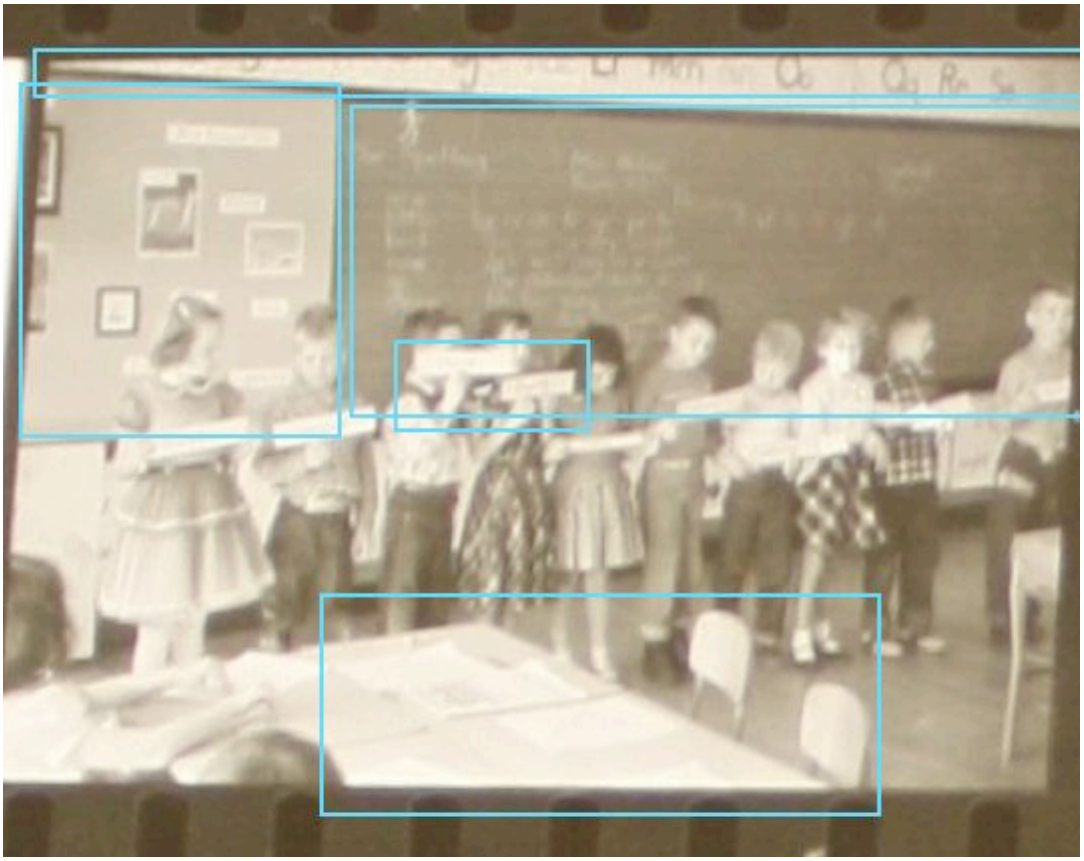
The above Figure 4.7 provides an example of an analysis of an image in the 1930-1939 continuum. The researcher coded visuals of context such as the teacher's desk, chalkboard along the back wall, papers posted to the wall, tables for students, and books or workbooks for students to be visual contextual signs that triggered to the researcher that this environment was used for educational purposes.

Figure 4.8 Approach to Analyzing the Perspective of Context, 1940-1949



The above Figure 4.8 provides an example of an analysis of an image in the 1940-1949 continuum. The researcher coded visuals of context such as the chalkboard, rows of chair/desks, instructor's table and chair as well as the instructional materials (i.e. map on stand and papers in front of students) to be visual contextual signs that triggered to the researcher that this environment was used for educational purposes.

Figure 4.9 Approach to Analyzing the Perspective of Context, 1950-1959



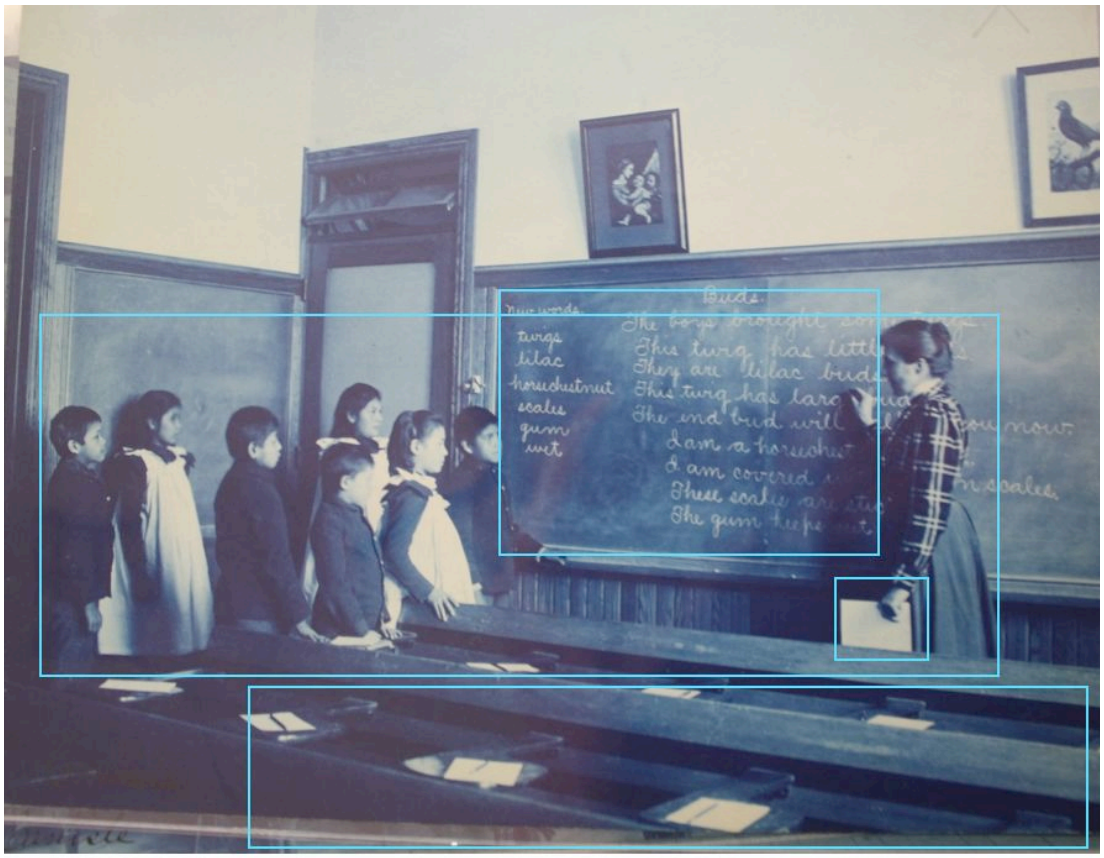
The above Figure 4.9 provides an example of an analysis of an image in the 1950-1959 continuum. The researcher coded visuals of context such as the bulletin board and materials, alphabet chart above the chalkboard, chalkboard, cards held by students, as well as the desk and chairs in a cluster to be visual contextual signs that triggered to the researcher that this environment was used for educational purposes.

These seven photographs were randomly selected from each of the seven time period continua. These are a sample of the data analysis conducted on all 1,812 photographs of the data collection. Themes emerged when specific objects or images within the photographs became repetitive. These findings from the perspective of context are presented in Chapter 5.

Analysis through the Lens of the Perspective of Pedagogy

The next perspective that was viewed and coded in isolation was the perspective of pedagogy. The criteria for pedagogy was defined by the researcher as any concrete object or abstract interaction visible within the photograph that triggered mindful thoughts of approaches or acts of teaching and learning within a school or classroom. The researcher examined each of the 1,812 photographs using the visual lens of pedagogy when viewing the images presented in the Library of Congress photographs of Classrooms in the United States. This close examination involved the researcher critically viewing each individual photograph for the purpose of coding specific images within the photograph that represented, displayed, or communicated criteria that would categorize the photograph as an image of school. When the researcher identified a specific image, within a photograph, the HyperResearch software was utilized to code the interaction or object within the photograph as a perspective of pedagogy. Again, the number of codes within one photograph could be numerous, as the researcher critically viewed the photograph, coding when the criteria being viewed could be categorized as a pedagogical element of school.

Figure 4.10 Approach to Analyzing the Perspective of Pedagogy, 1900-1909



The above Figure 4.10 provides an example of an analysis of pedagogy from an image in the 1900-1909 continuum. The researcher coded visuals such as 1.) the identical materials (paper/writing instrument) spaced out among the individual seating in the rows of desk; 2.) the teacher writing on the chalkboard; 3.) the teacher standing in front of students holding a paper (instructional material) while motioning attention to the writing on the chalkboard; and, 4.) a cluster of students standing facing the teacher and chalkboard. These visual signs triggered to the researcher to consider pedagogical approaches within this teaching and learning environment as well as identifying these acts to be associated with a physical environment used for educational purposes.

Figure 4.11 Approach to Analyzing the Perspective of Pedagogy, 1910-1919

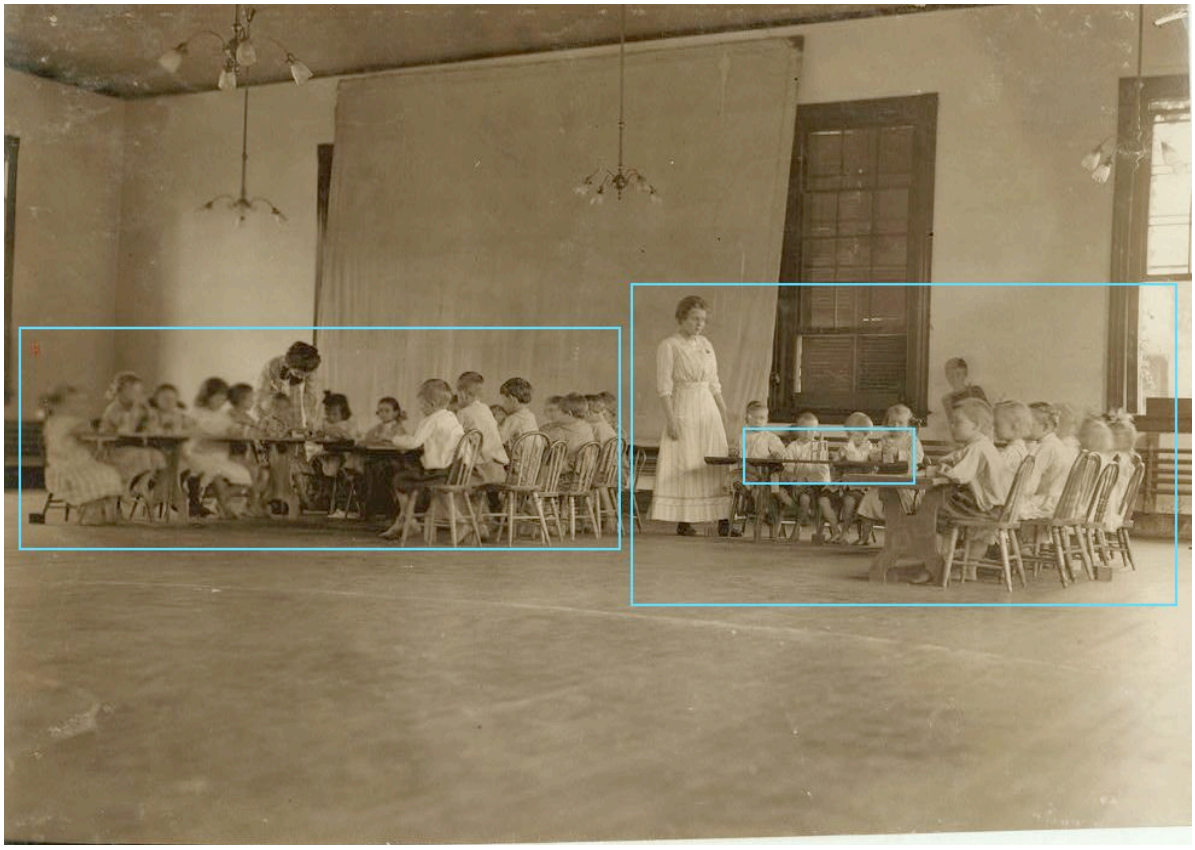


Figure 4.11 demonstrates an analysis of a perspective of pedagogy from an image in the 1910-1919 continuum. The researcher coded visual such as 1.) two groups of children sitting at L- and U-shaped cluster of tables and chairs; 2.) one teacher standing next to each of the table clusters (one bent over (attending to individuals), and one upright (supervisory)); and, 3.) children manipulating objects while sitting at the table. All indicated visual signs of pedagogical approaches within this environment as well as associating these acts with a physical environment used for educational purposes.

Figure 4.12 Approach to Analyzing the Perspective of Pedagogy, 1920-1929

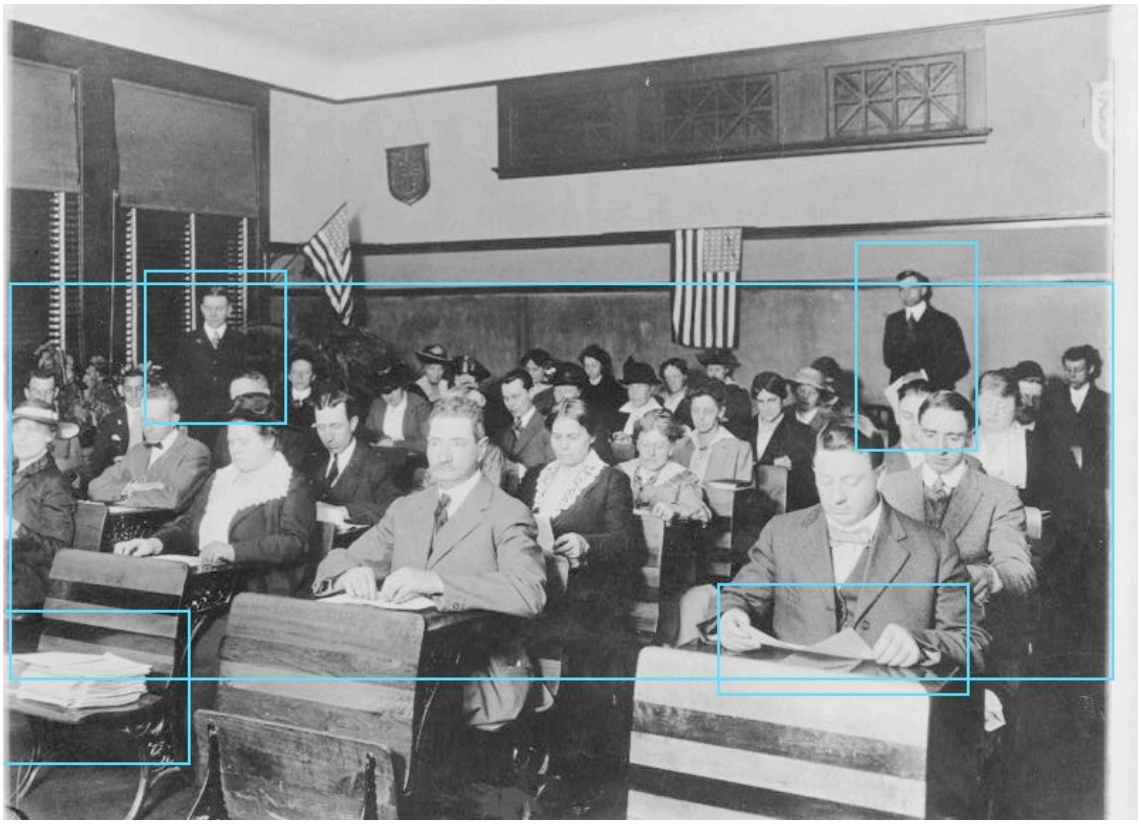


Figure 4.12 demonstrates an analysis of a perspective of pedagogy of an image in the 1920-1929 continuum. The researcher coded visuals such as 1.) stack of papers sitting on the bench of the connected desks; 2.) one teacher standing among the rows of connected desk/chairs; 3.) one teacher leaning against the chalkboard at the back of the room; 4.) students sitting in rows of desk, and 5.) students appearing to work on the same paper at own pace. All indicated visual signs of pedagogical approaches within this environment as well as associating these acts with a physical environment were used for educational purposes.

Figure 4.13 Approach to Analyzing the Perspective of Pedagogy, 1920-1950

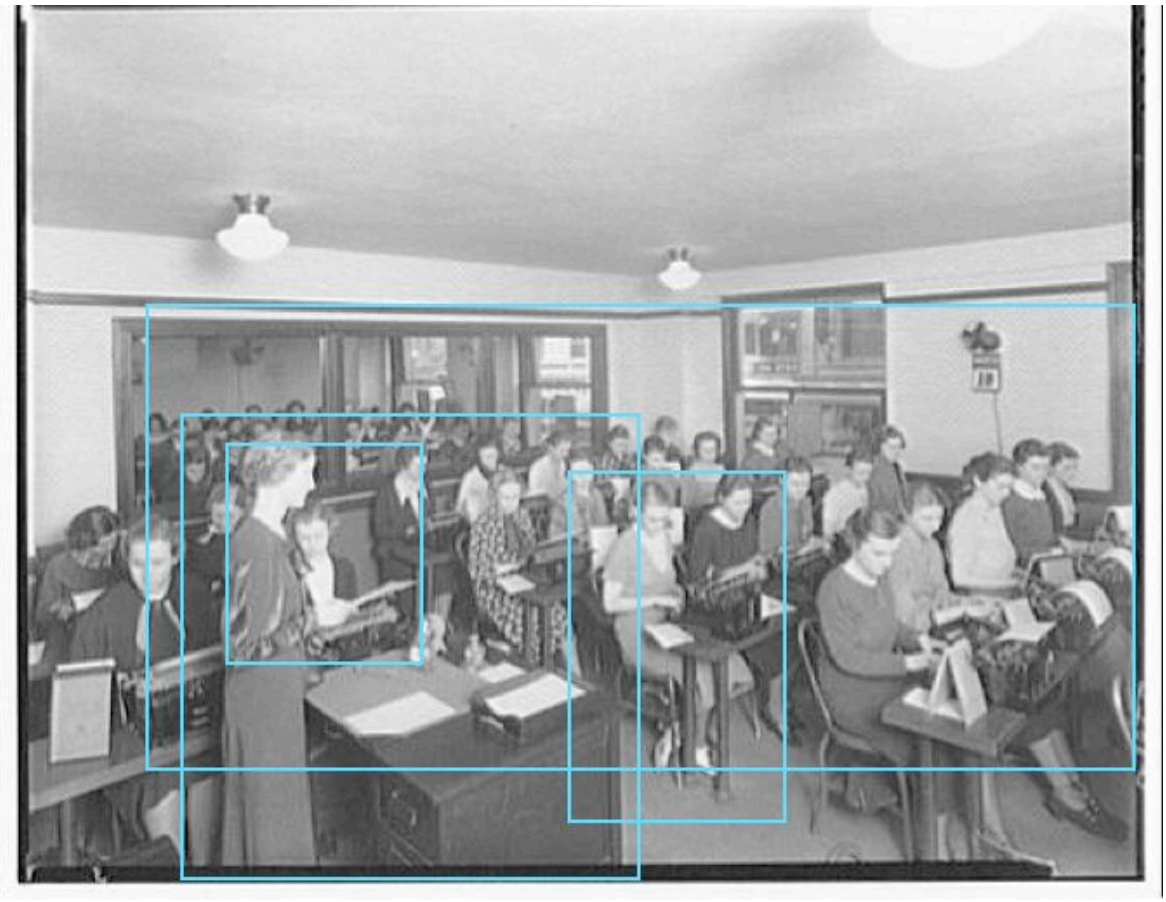


Figure 4.13 exemplifies an analysis of a perspective of pedagogy of an image in the 1920-1950 continuum. The researcher coded visuals such as 1.) the teacher standing at the front of the instructional environment beside a teacher's desk; 2.) student chairs and work space identical and organized in row formations, not only in the present room but also in the room visible through the window at the back of the room; 3.) individual students active in a similar activity; and, 4.) the teacher oversees activity and directs the activity via the paper material in hand. All indicate visual signs of pedagogical approaches within this environment associated with an environment used for educational purposes.

Figure 4.14 Approach to Analyzing the Perspective of Pedagogy, 1930-1939

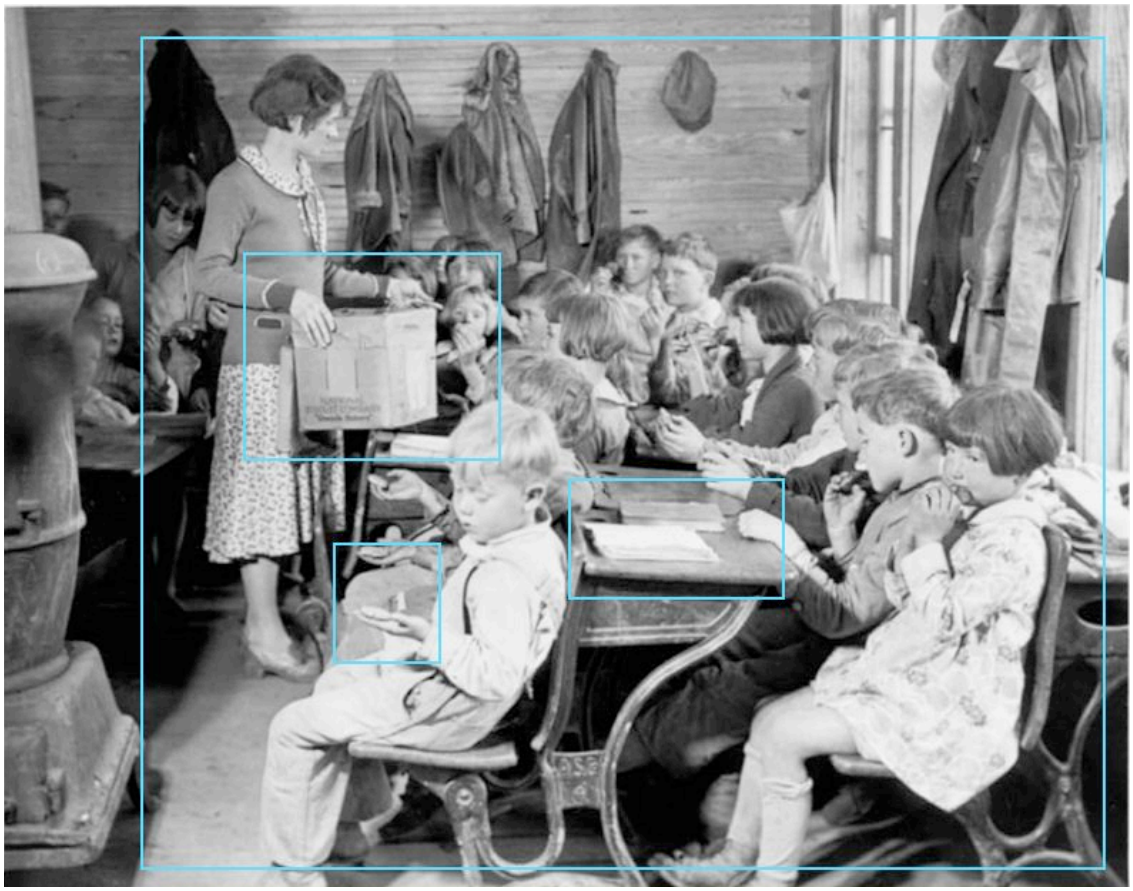


Figure 4.14 displays the analysis of a perspective of pedagogy in an image from the 1930-1939 continuum. The researcher coded visual stimuli such as 1.) teacher passing out cookies to students; 2.) students sitting in rows of connected desks and benches receiving a cookie from teacher in front of desks; 3.) students prompted to look at cookie and taste the cookie; 4.) paper materials on some of the students' desks. All of these visuals indicated signs of pedagogical approaches within this environment as well as associated with education.

Figure 4.15 Approach to analyzing the Perspective of Pedagogy, 1940-1949

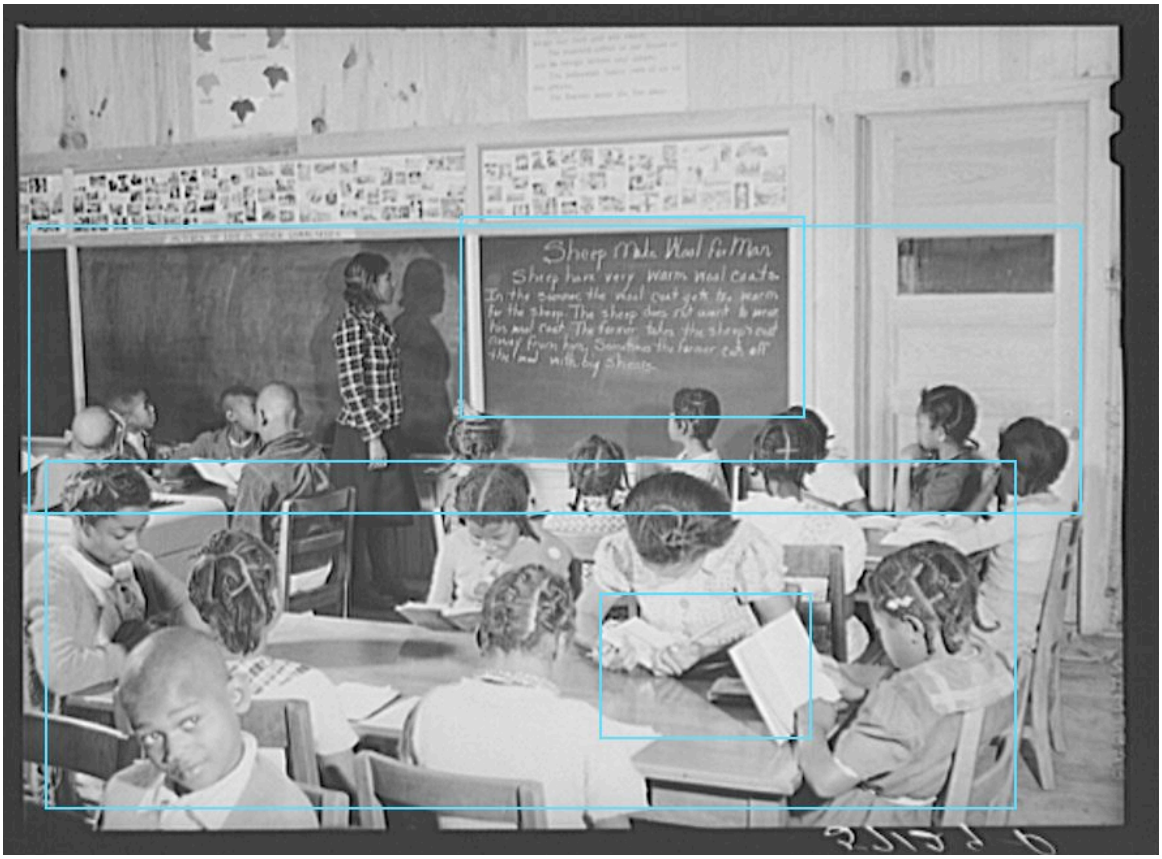


Figure 4.15 demonstrates an analysis of a perspective of pedagogy from an image in the 1940-1949 continuum. The researcher coded visual stimuli such as 1.) one group of students at a table read; 2.) two groups of students at tables listen and watch the teacher; 3.) students have individual reading materials; and 4.) teacher directs students' attention to writing on the chalkboard. These visual signs represent evidence of pedagogical approaches within this environment, and therefore, providing evidence of an environment of schooling.

Figure 4.16 Approach to Analyzing the Perspective of Pedagogy, 1950-1959

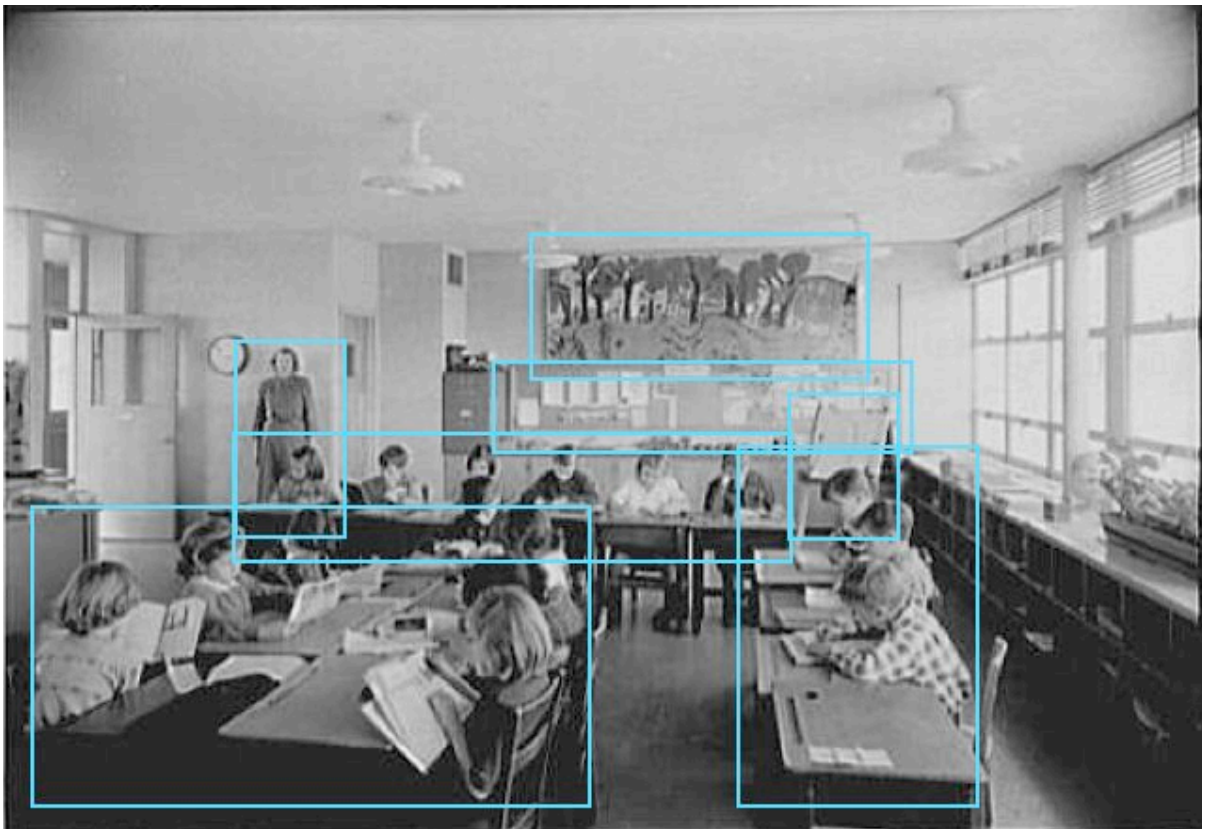


Figure 4.16 demonstrates an analysis of a perspective of pedagogy from an image in the 1950-1959 continuum. The researcher coded visual stimuli such as 1.) students in a cluster of desk read books independently; 2.) students in L- and rectangular-shaped desk clusters write in a workbook; 3.) teacher stands in the background monitoring individual work; 4.) an easel sits in the background; 5.) student artwork is posted on the wall; and, 6.) bulletin board displays student work and instructional material. These are visual signs of pedagogical approaches within this environment and in turn associate a physical environment used for educational purposes.

Following the perspective of pedagogy coding of all 1,812 images, themes emerged when specific interactions, objects, or images within the photographs became repetitive. These findings from a perspective of pedagogy are presented in Chapter 5.

Analysis through the lens of the Perspective of Teacher-Student Relationship

The third perspective that was viewed and coded in isolation was the perspective of teacher-student relationship. The criteria for teacher-student relationship was defined by the researcher as any interaction—abstract or concrete—visible within the photograph that triggered mindful thoughts of the role of a student and the role of a teacher within a school, learning environment, or classroom. The researcher examined each photograph using the visual lens of this perspective when viewing the images presented in the Library of Congress photographs of Classrooms in the United States. This close examination involved the researcher critically viewing each individual photograph for the purpose of coding specific images within the photograph that communicated criteria that would categorize the photograph as an image of school. When the researcher identified a specific image, within a photograph, the HyperResearch software was utilized to code the interaction or role within the photograph as a perspective of teacher-student relationship. Again, the number of codes within one photograph were numerous, as the researcher critically viewed the photograph and coding when the criteria being viewed could be categorized as a teacher-student relationship within a school setting.

Figure 4.17 Approach to Analyzing the Perspective of Teacher-Student Relationship, 1900-1909

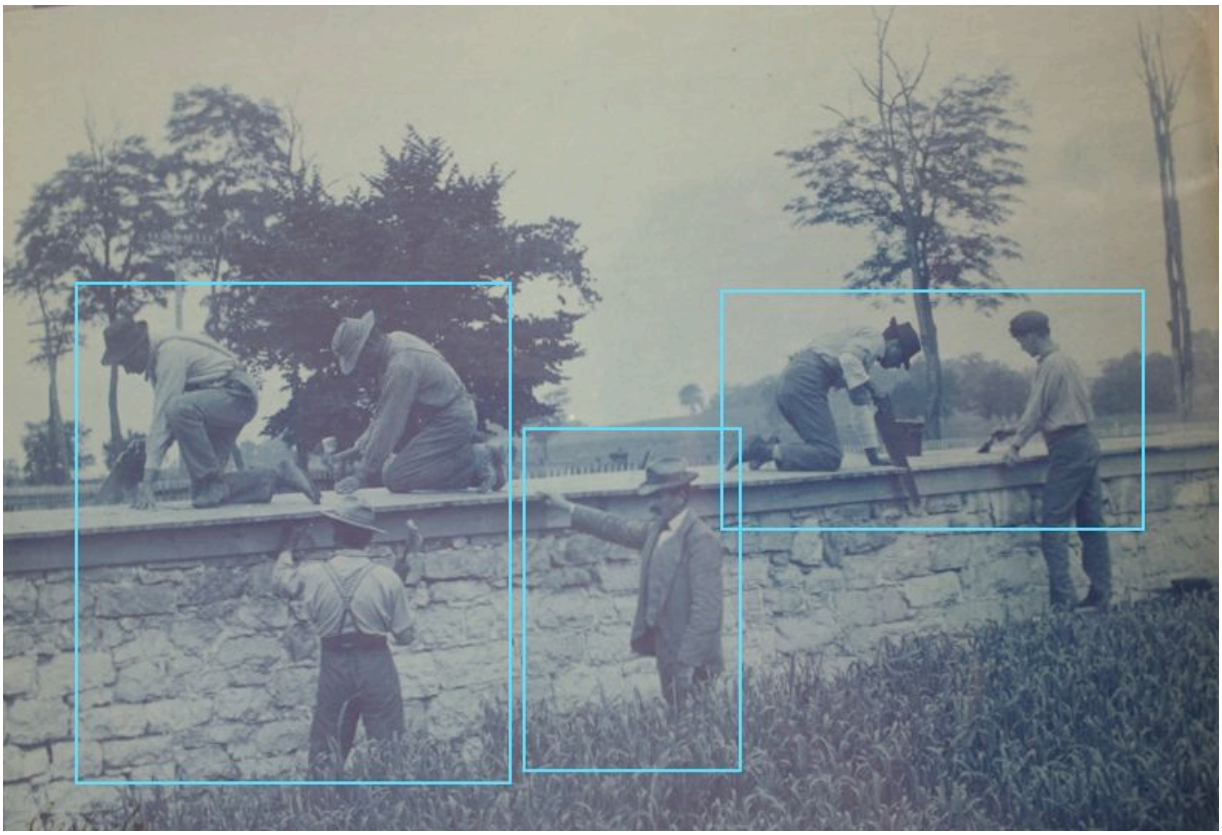
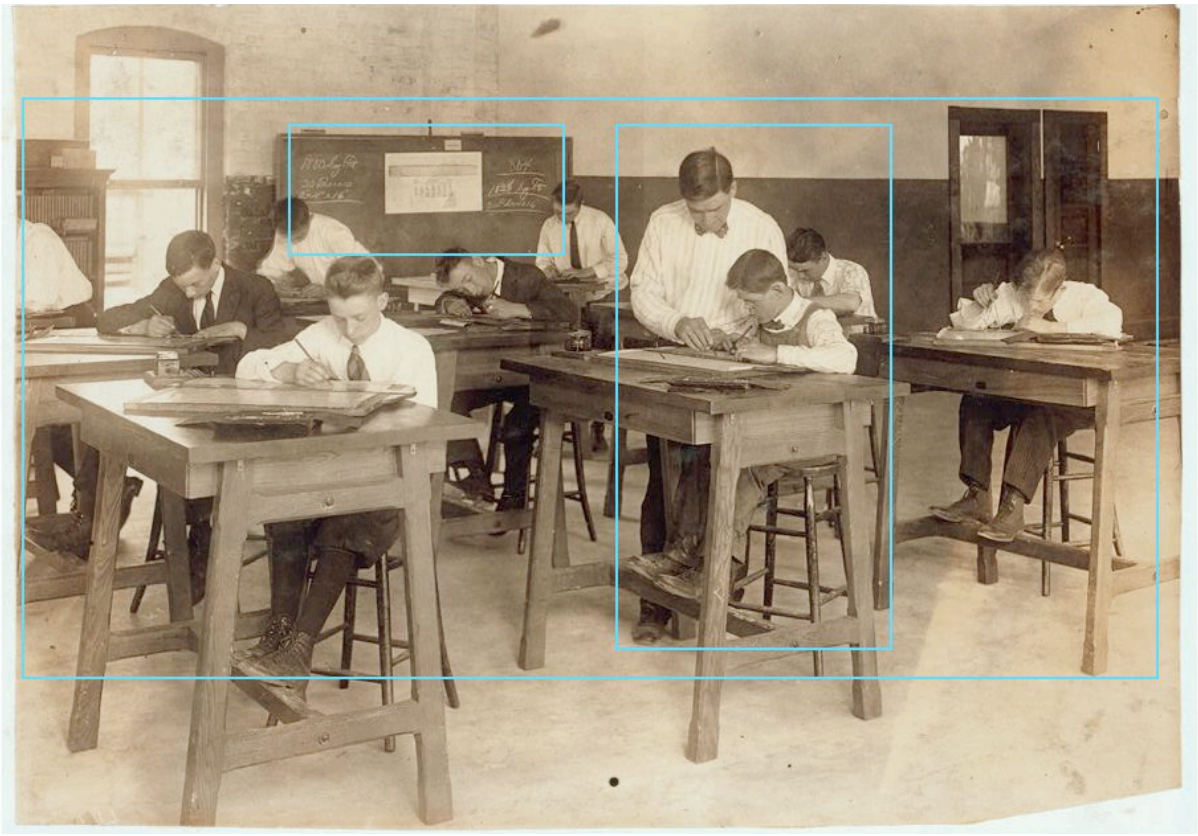


Figure 4.17 demonstrates the coding process as the researcher critically viewed a photograph categorized in the 1900-1909 time period continuum. Codes were assigned when the researcher viewed physical or abstract interaction between students and teacher. The visual codes assigned to this image are as follows: 1.) teacher standing in the middle of students as they work; 2.) a group of students working under the watch of a teacher; and, 3.) a pair of students working without the teacher's watch. These identified codes exemplified the teacher-student relationship presented in photographs of schooling.

Figure 4.18 Approach to Analyzing the Perspective of Teacher-Student Relationship, 1910-1919



The above photograph, Figure 4.18, demonstrates the coding process as the researcher critically viewed a photograph categorized in the 1910-1919 time period continuum. The researcher assigned codes when viewing physical or abstract interaction between students and teachers. The visual codes assigned to this image are 1.) teacher stands near individual student table to closely assist an individual student who is bent over work; 2.) students lean over individual tables to work independently with individual materials; and, 3.) writing on the chalkboard. These identified codes exemplified teacher-student relationship presented in photographs of schooling.

Figure 4.19 Approach to Analyzing the Perspective of Teacher-Student Relationship, 1920-1929



This photograph, Figure 4.19, shows the coding process as the researcher viewed a photograph categorized in the 1920-1929 time period continuum. The researcher assigned a code when viewing presentation of a student and/or teacher role within a classroom environment. The visual code assigned to this image was the identical posture of students present in this image. Students have their feet on the floor, fingers woven together, and backs erect as well as firmly pressed against the bench presenting a uniformed posture and presentation.

Figure 4.20 Approach to Analyzing the Perspective of Teacher-Student Relationship, 1920-1950

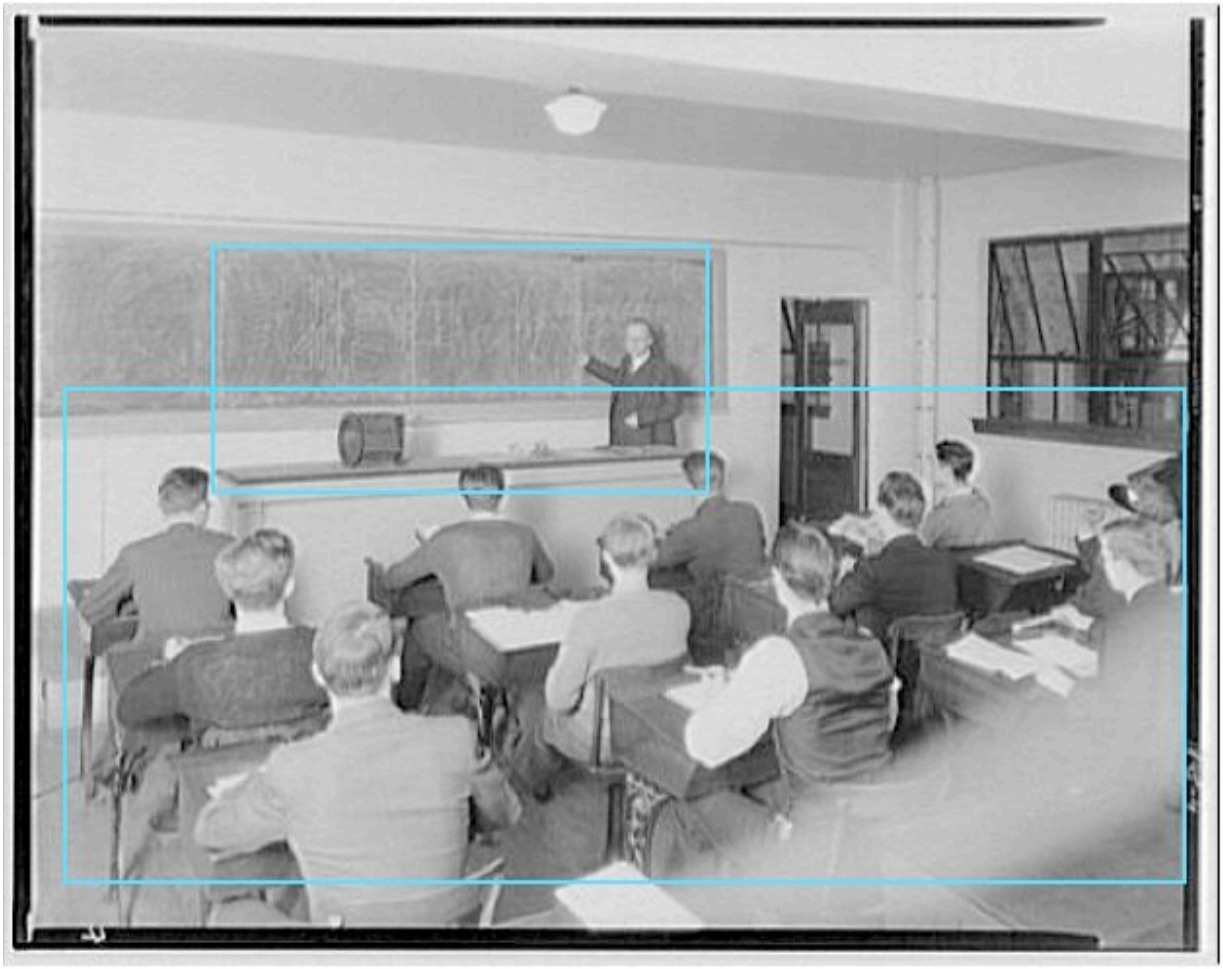
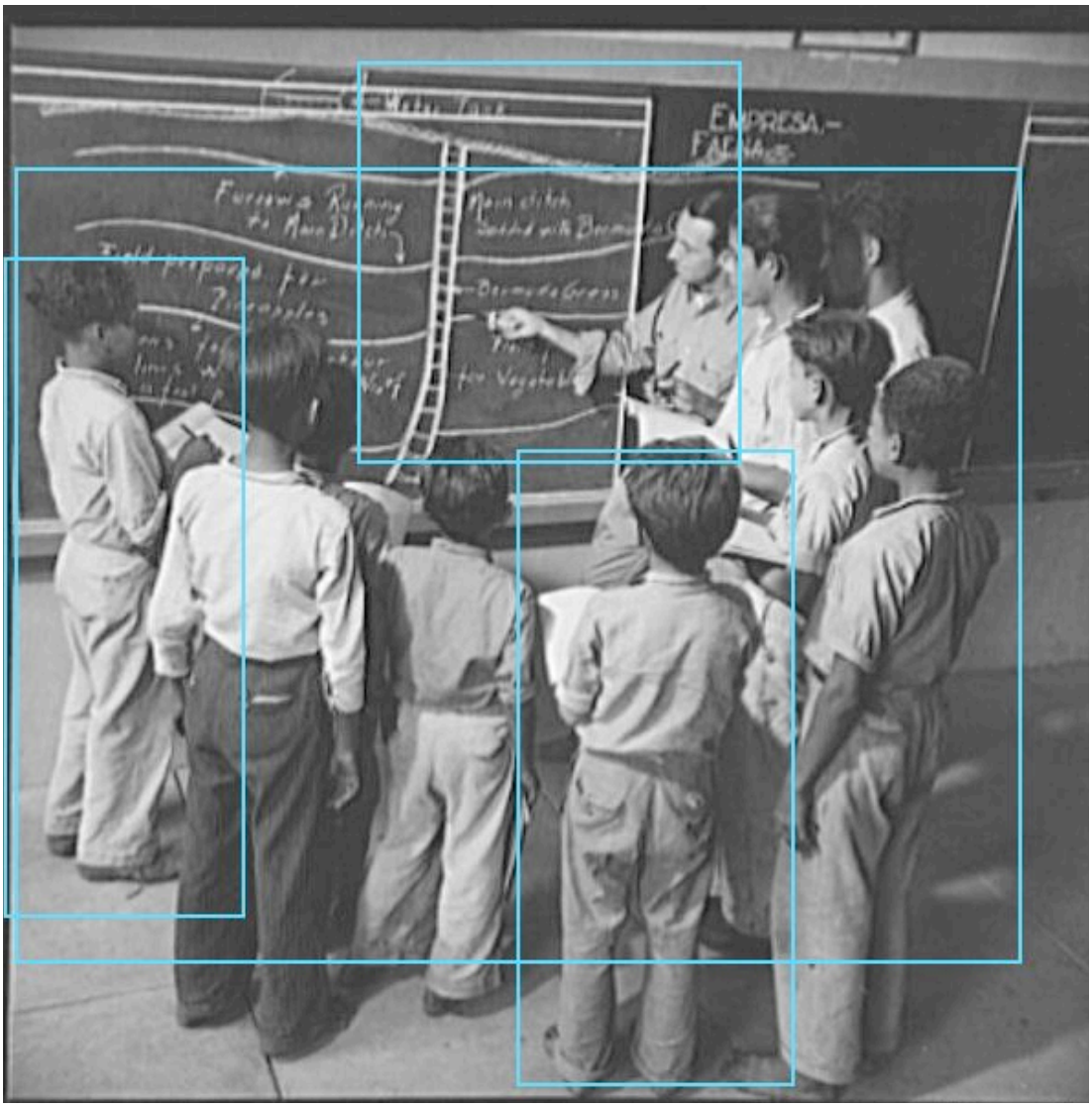


Figure 4.20 demonstrates the coding process as the researcher critically viewed a photograph categorized in the 1920-1950 time period continuum. Codes were assigned when the researcher viewed physical or abstract interaction between students and teacher. The visual codes assigned to this image are as follows: 1.) teacher standing erect at the front of the instruction with one arm bent at the waist and the other pointing to the information written on the chalkboard; and, 2.) students sitting at individual desks and chairs in a row formation while leaning slightly forward or sitting straight.

Figure 4.21 Approach to Analyzing the Perspective of Teacher-Student Relationship, 1930-1939



The Figure 4.21 demonstrates the coding process as the researcher critically viewed a photograph categorized in the 1930-1939 time period continuum. Codes were assigned when the researcher viewed interaction between students and teacher. The visual codes assigned to this image are 1.) teacher standing in the front of the chalkboard with one arm pointing to the information written on the chalkboard with a writing utensil in hand; 2.) students standing

around the chalkboard and teacher in a U-formation; and, 3.) students holding a paper/book and writing utensil, writing down information as the teacher shares information.

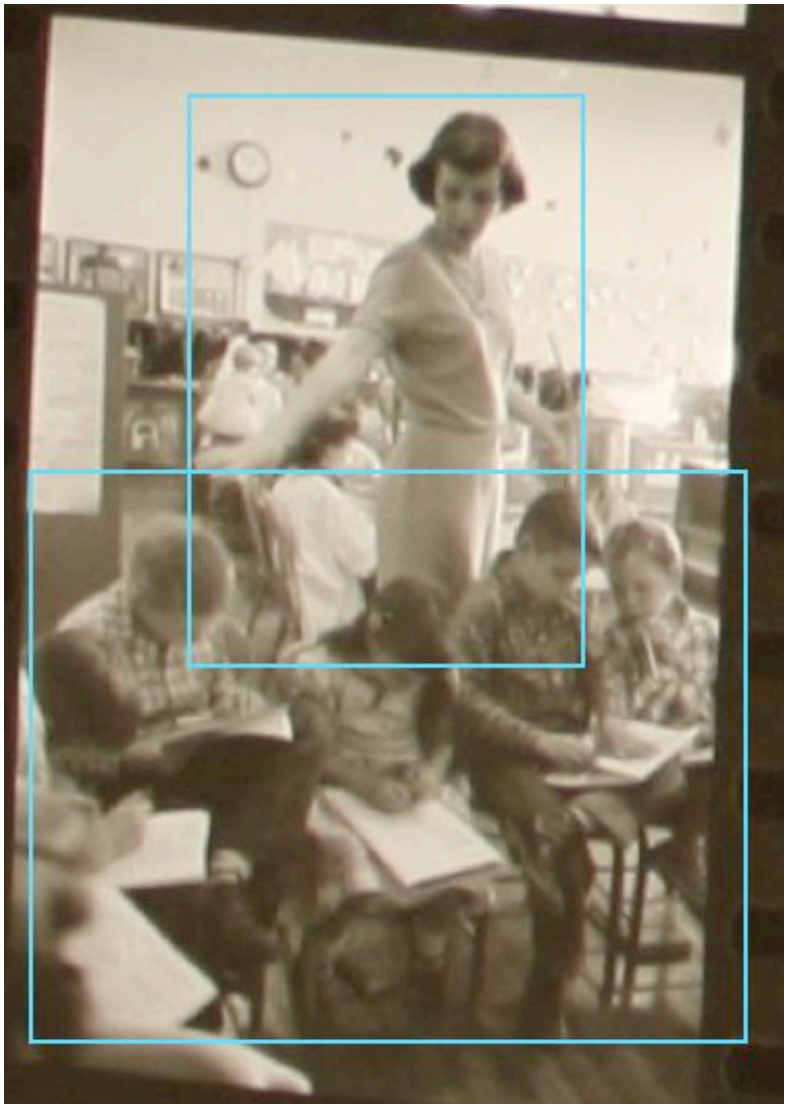
Figure 4.22 Approach to Analyzing the Perspective of Teacher-Student Relationship, 1940-1949



Figure 4.22 presents the researcher's coding process when viewing a photograph categorized in the 1940-1949 time period continuum. The following codes were assigned when the researcher viewed interaction between students and teacher: 1.) photograph focuses on student's posture, as she sits erect with back against chair support, feet on the ground, and hands placed on top of a notebook on the desk surface; 2.) students in the background possess a similar

posture when sitting in the connected desk and chair while eyes are focused on something off camera.

Figure 4.23 Approach to Analyzing the Perspective of Teacher-Student Relationship, 1950-1959



The photograph in Figure 4.23 displays the researcher's coding when viewing a photograph categorized in the 1950-1959 time period continuum. The following codes were assigned when the researcher viewed interaction between students and teachers: 1.) teacher stands over students working in a small group, with her body slightly bent as she monitors other

students within the classroom; and, 2.) students sit at chairs in a small U-formation bent over workbooks as the teacher motions to one of the students.

Following the coding process for the perspective of teacher-student relationship for all 1,812 images, themes emerged when specific interactions, objects, or images within the photographs became repetitive. These findings from the perspective of teacher-student relationship are presented in Chapter 5.

First and Second Layer of Analysis Conclusion

All 1,812 images within the data collection of the Library of Congress were coded at least seven times within the first and second layers of analysis. This was achieved by coding images into the four contextual category continua (time period, urban-rural, wealth-poverty, active-passive) and the three perspectives (context, pedagogy, teacher-student relationship). Figures 4.3 through 4.23 were displayed and discussed as examples of the 1,812 photographs. Themes emerged when images within the photographs became repetitive. These examples were selected from the seven time period continua solely to demonstrate a balanced representation throughout the first half of the 20th Century.

Table 4.1, provides a brief overview of the emerging themes that saturated the open-coding process within the second layer of analysis. These themes became the focus for the identification of possible icons that emerged during the semiotic analysis of layer 3.

Table 4.1 Emerging Themes from the Second Layer of Open-Coding

Perspectives	**Themes**		
context	use of wall space	furniture	material
pedagogy	use of materials	arrangement of furniture	arrangement and/or interaction of people
teacher-student relationship	posture		

Semiotic Analysis of School Photographs: Layer 3 of Analysis

Once the open-coding process of the second layer was completed, the researcher utilized the themes (See Table 4.1.) discovered in layer 2 to identify the denotations (who or what is being represented) and the connotations (ideals or values expressed through the denotations). Utilizing the codes determined within the second layer of analysis, the researcher identified icons represented in the collection of photographs that emerged from the identified denotations and connotations. Chapter 5 more thoroughly discusses the findings of this semiotic analysis through the identification of emerging icons. The following briefly demonstrates the analysis process.

Perspective of Context

The following presents the process of the researcher's semiotic analysis within the third layer of analysis when reviewing images through the lens of context.

Image 4.1 Example Layer 3 Analysis: The Perspective of Context and Use of Wall Space



Table 4.2 Examples of Denotation and Connotation for Image 4.1

The Perspective of Context: Use of Wall Space	
Denotation	*Connotation*
American flag	patriotic representation, public school, and assimilation
chalkboard	instructional focus; writing on the board guides teacher-directed instruction; a group of students contained to the teacher's writing on the chalkboard as a context of learning
pictures	representation of valued images and figures

Image 4.2 Example of Layer 3 Analysis: The Perspective of Context and Materials

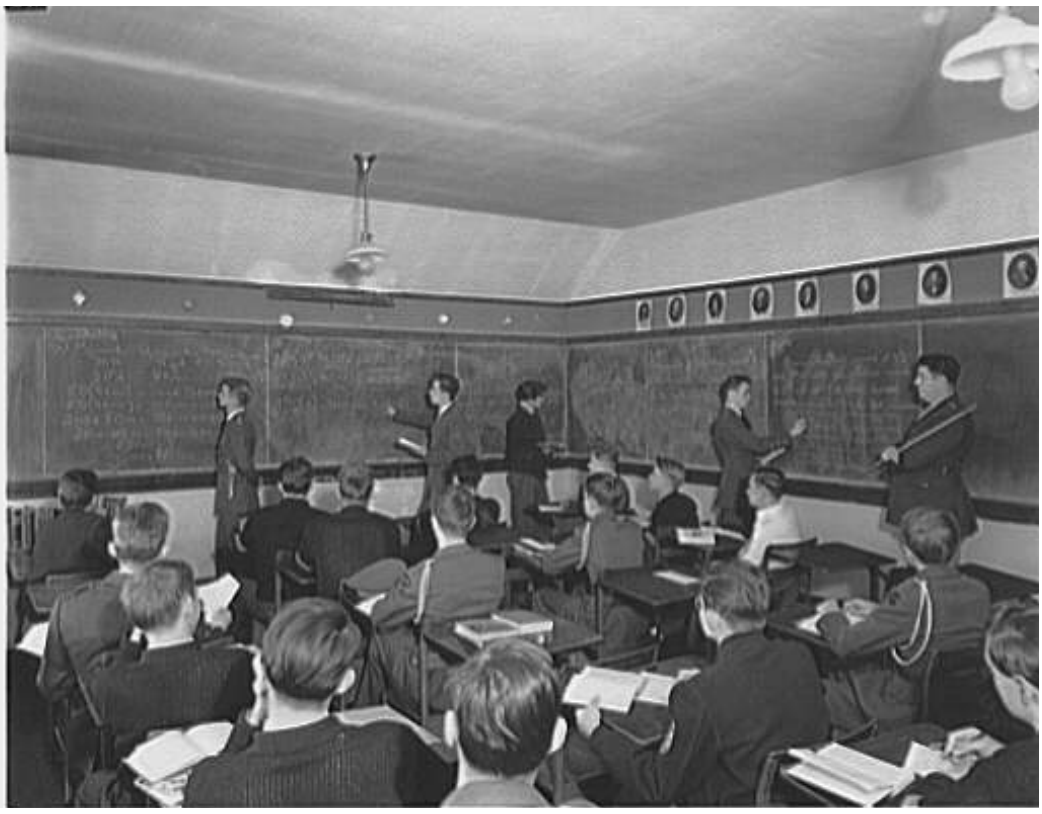


Table 4.3 Examples of Denotation and Connotation for Image 4.2

The Perspective of Context: Materials	
Denotation	*Connotation*
books	information comes from the published printed text; individual decoding and comprehending written text
notebooks	gained information individually translated and transferred into a personal notebook for future reference
chalkboard & chalk (or) paper & pencil	individual recording of learning and accountability for reproducing information learned

Image 4.3 Example of Layer 3 Analysis: The Perspective of Context and Furniture



Table 4.4 Examples of Denotation and Connotation for Image 4.3

The Perspective Context: Furniture	
Denotation	*Connotation*
individual chair	learning takes place in isolation; individuals independently obtain knowledge and information for textual representation
individual desk	small individual work space houses the necessary materials for reading and writing

Perspective of Pedagogy

The following presents the process of the researcher's semiotic analysis within the third layer of analysis when reviewing images through the lens of pedagogy.

Image 4.4 Example of Layer 3 Analysis: The Perspective of Pedagogy and Arrangement of Furniture



Table 4.5 Examples of Denotation and Connotation for Image 4.4

The Perspective of Pedagogy: Arrangement of Furniture	
Denotation	*Connotation*
individual stools attached to the floor	individual stools attached to the floor in rows presenting a lecture format; students responsible for obtaining information written and verbally shared by the instructor; this is not an individual student working space, as there is no individual desk or table provided for individuals to craft, create, or reproduce; the instructor as the giver of information and the students as the receivers; reproduction of information is most likely valued
table at the front of the rows of stools	a table for presentation and lecture purposes; the instructor presents information; students obtain and retain information via this brief presentation/lecture encounter

Image 4.5 Example of Layer 3 Analysis: The Perspective of Pedagogy and Use of Material



Table 4.6 Examples of Denotation and Connotation for Image 4.5

The Perspective of Pedagogy: Use of Materials	
Denotation	*Connotation*
individual student workbook	individual students work independently in workbooks; students document their ability to reproduce knowledge and skills within these boundaries
student artwork posted on the wall	in the background of the learning, student artwork is displayed; art not present within the task of completing individual workbook; art has been accomplished and valued

Image 4.6 Example of Layer 3 Analysis: The Perspective of Pedagogy and Arrangement and/or Interactions of People



Table 4.7 Examples of Denotation and Connotation for Image 4.6

The Perspective of Pedagogy: Arrangement of people	
Denotation	*Connotation*
students sitting in rows of desks	learning is an independent and isolated activity
students sit in chairs arranged in a small group formation	learning is a collaborative activity
teacher stands at the side of the room	the role of the teacher is to monitor students as they work in isolation or in groups

Perspective of Teacher-Student Relationship

The following presents the process of the researcher's semiotic analysis within the third layer of analysis when reviewing images through the lens of teacher-student relationship.

Image 4.7 Example of Layer 3 Analysis: The Perspective of Teacher-Student Relationship and Posture



Table 4.8 Examples of Denotation and Connotation for Image 4.7

The Perspective of Teacher-Student Relationship: Posture	
Denotation	*Connotation*
students raise hands	students given permission to speak and respond to directed instruction
teacher sits on the desk at the front of the rows of desks	teacher is in control of the learning environment and the giver of information
students sit in rows facing the teacher at the front of the room.	students do not necessary conduct their own learning and must receive the information via textbook and teacher direction

Images 4.1 through 4.7 and Tables 4.2 through 4.8 demonstrate a process of viewing the images within the researcher's data collection and assigning denotations and connotations to specific photographs. Utilizing the established themes from Layer 2, the researcher began to identify possible icons presented within the context of a classroom; icons presented in the pedagogy of a classroom; and, icons which communicated the role of students and teachers within a classroom.

Chapter 5 - Findings

Contextual Continua: Layer 1 of Analysis Findings

Within the first layer of analysis, the researcher found that categorizing each of the 1,812 photographs within the appropriate placement in each of the four predetermined continua revealed that the collection of photographs presented a balance of visual representation based on the predetermined contextual categories (Time Period, Urban-Rural, Wealth-Poverty, and Active-Passive). No part of a continua lacked representation, allowing the researcher to continue with the second and third layer of analysis knowing that the data represented the criteria of the four identified categories and individual continua.

Before beginning the second and third layer of analysis, the researcher returned to each specific portion of the continua browsing the photographs assigned to the designated continua. Below is a discussion of similarities among photographs within each assigned category continua (Time Period, Urban-Rural, Wealth-Poverty, and Active-Passive) documenting the appropriateness of the placement of assigned photographs from the larger data collection.

The Time Period category continuum consisted of the seven time durations: 1900-1909, 1910-1919, 1920-1929, 1920-1950, 1930-1939, 1940-1949, and 1950-1959. Initially, each photograph was placed in the appropriate time duration using the Library of Congress's recorded and cataloged time period for the individual photograph. Following the sorting of photographs within the above time durations, similarities were consistent within each of the assigned time period durations. Photographs within each assigned time duration shared a common presence in criteria such as clothing, building materials, and style of furniture. This was also true when looking at the other three continua.

For example, when reviewing photographs assigned to a rural placement on the Urban-Rural contextual category continuum, the researcher observed a majority of the photographs demonstrated physical structures built of raw wood materials and some stone. Clothing and environmental factors represented a rural setting and supported the placement of these photographs in a rural setting. When reviewing the Poverty placement within the Wealth-Poverty category continuum, similar attributes such as lack of shoes, smaller space, outdoors context, and similar clothing were seen. When viewing the active-passive placement along the Active-Passive continuum, criteria such as students standing and visible interaction were physically presented. These types of criteria and similarities strengthened appropriate placement on each of the category continua.

Open-Coding of Three Predetermined Perspectives: Layer 2 of Analysis

Emerging Themes

The following discusses the findings of the second layer of data analysis. This discussion consists of emerging themes presented in the three predetermined perspectives: context, pedagogy, and teacher-student relationship. Due to this research being influenced by the visual culture and visual semiotic, the themes emerged from repetitive representation of visual images, objects, or interactions represented within the Library of Congress photographs of the first half of the 20th Century. As previously stated, the photographs represent historical periods, although the analysis was not from a historical perspective.

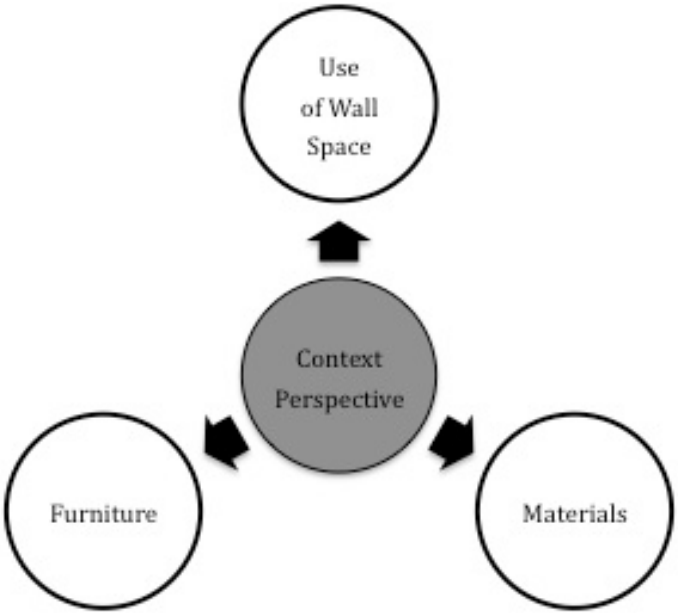
As presented in Chapter 4, Table 4.1, seven themes emerged from the three predetermined perspectives (context, pedagogy, and teacher-student relationship). Three themes saturated the data collection when viewing through the lens of context: use of wall space, materials, and furniture. Three themes saturated the data collection when viewing through the

lens of pedagogy: use of material, arrangement of furniture, and arrangement and/or interactions of people. One theme saturated the data collection when viewing through the lens of teacher-student relationship: posture. It is important to note that although the images presented throughout Chapter 5 do not have the blue coding as presented in Chapter 4, all 1,812 images were coded. For the presentation of themes within Chapter 5 the researcher has decided to display images in their natural state. When reading the findings presented in Chapter 5, due to the visual nature of this research, it is essential that the reader thoughtfully read both images and text.

Emerging Themes through the Perspective of Context

Three visual themes emerged from this Library of Congress photograph collection when viewing through the perspective of context. (See Figure 5.1.) These three themes were use of wall space, materials, and furniture.

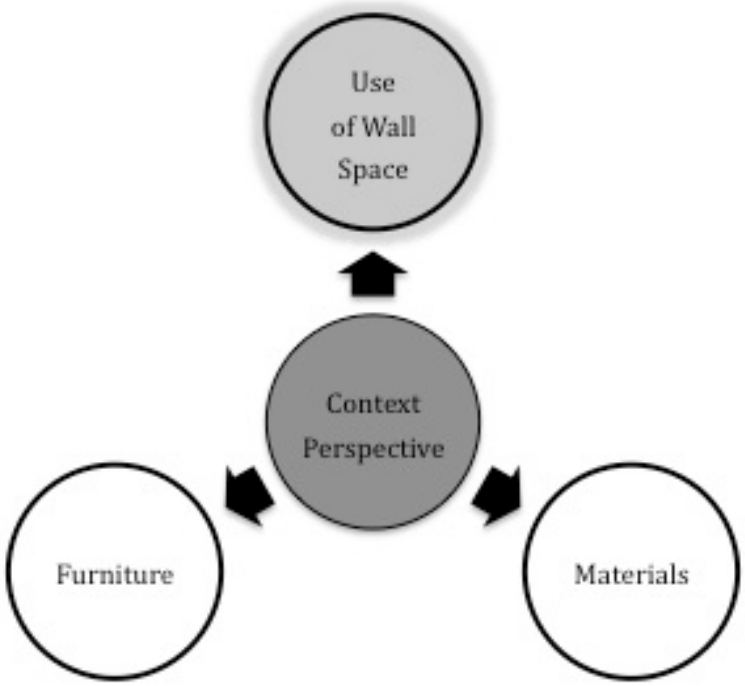
Figure 5.1 Emerging Themes from the Perspective of Context



First Contextual Theme: Use of Wall Space

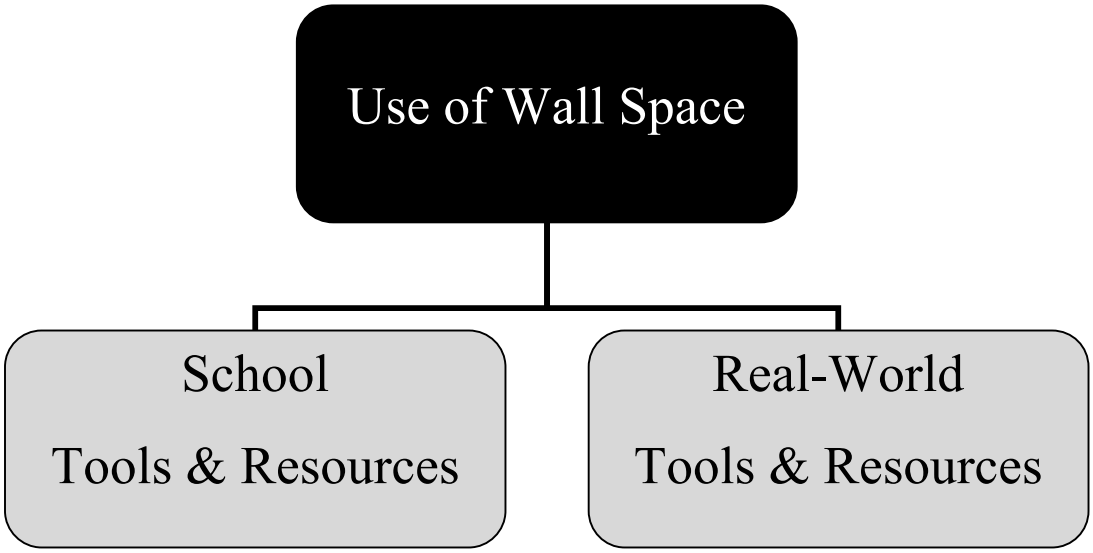
The first emerging theme was the use of wall space. (See Figure 5.2.) The researcher became saturated in the context of how classrooms utilized wall space. A similarity and repetitive nature from image to image demonstrated that walls were a visual space within the context of a classroom that were used for a purpose.

Figure 5.2 First Emerging Theme from the Perspective of Context



The researcher concluded that the use of wall space could fall into one of two categories: 1.) wall space housed school tools/resources; and, 2.) wall space housed real world tools/resources. (See Figure 5.3.) The researcher defined school tools/resources as tools individuals would most likely see, or use, in a classroom setting, but not necessarily be presented in the same fashion in the real world outside of school. The second category defined real-world tools/resources as tools of trade or resources that popular culture would see, and use, outside of the classroom.

Figure 5.3 Two Categories within the First Emerging Theme from the Perspective of Context



The first category, school tools/resources, was most readily seen within the perspective of context of the photographs presented in the data collection. Classroom walls typically possessed framed pictures, chalkboards, posters, paper material resources, student work, bulletin boards, wall clocks, shelving, as well as a hanging American flag. Visual codes demonstrated that between the early 1900's through the late 1950's classrooms within the American schools progressively utilized wall space in a similar and familiar manner. As demonstrated in the following photographs (See Images 5.1 through 5.10.) wall space was utilized in this manner in classroom environments of rural and urban areas, classrooms of wealth and poverty, both active and passive environments, as well as represented across the predetermined time periods.

Image 5.1 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.2 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.1 demonstrates the use of wall space for displaying instructional materials, examples, and resources as a focus for reproduction within art lessons. Similar coding, such as a clock hanging on the wall, framed artwork, and a chalkboard positioned against a wall demonstrate the use of wall space within the classroom environment. This photograph demonstrates wall space housed instructional tools that were readily accessible for instructional use. The following photographs provide further examples of the use of wall space.

In Image 5.2 the use of the wall space, specifically the chalkboard, is being utilized for instruction as the students interact with this wall space to demonstrate learning. In addition to the chalkboard, a small boarder outlines both chalkboards lining two walls within this classroom.

Image 5.3 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.4 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Similar to the previous photographs, Image 5.3 exemplifies how the classroom environment utilizes wall space. In addition to the large chalkboard covering one wall, the classroom walls have small charts displaying different types of tea pots as well as geographic terrain. Along the side of the classroom wall hangs a small bulletin board as well as paper charts taped to another display board. Image 5.4, again, displays how the wall space is used to house charts and resources as well as framed images above the instructional materials.

Image 5.5 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.6 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.5, like the previous images, demonstrates how the wall space within a classroom is utilized for tools and resources. In this case the bulletin board has become interactive as a student adds content and makes connections to the instructional context of the classroom. However, Image 5.6, presents a classroom that exhibits posters, charts, as well as a chalkboard in the background of this science lesson. Unlike the previous images (Image 5.1 – Image 5.6) the photographs that follow demonstrate how resources on the wall space are available, but not necessarily being utilized at the represented moment of instruction. Therefore, demonstrating space does not seem to be utilized as a focus of instruction. The following images represent further use of wall space within the context of a classroom.

Image 5.7 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.8 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.9 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.7 demonstrates the use of wall space as chalkboards and hand written posters occupy the wall space in the background of this classroom. Within Image 5.8 is a visible example of the use of wall space as a place to display student work, writing on the chalkboard, student projects sitting on the chalkboard tray, and other instructional materials.

Image 5.9 (above) and Image 5.10 (below) continue to show how wall space is progressively utilized to display student work in addition to other instructional materials. In both of the above and below photographs, children's work appears to cover the bulletin boards on either side of the chalkboard as well as the long bulletin board on the side of the classroom. Children's work decorates the top of the chalkboard as well. The photograph below (Image 5.10) demonstrates how wall space is used to display various children's drawings.

Image 5.10 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Within this data collection of school photographs, it is questionable as to how much the materials presented on the wall space within the context of a classroom is utilized. In a majority of the photographs it appeared that this wall space was occupied but not necessarily utilized within momentary lessons.

The second category which emerged within the perspective of context's theme of the use of wall space, real-world tools/resources, was seen within limited photographs. These were within photographs of trade classrooms such as carpentry, textiles, construction, typing, shoemakers, etc. Although some wall space did have criteria from the first category of school tools/resources, the majority of wall space within the trade environment would typically be used as a storage for tools and materials. The following photographs exemplify this criteria.

Image 5.11 Example of Data Representational of the First Emerging Theme from the Perspective of Context

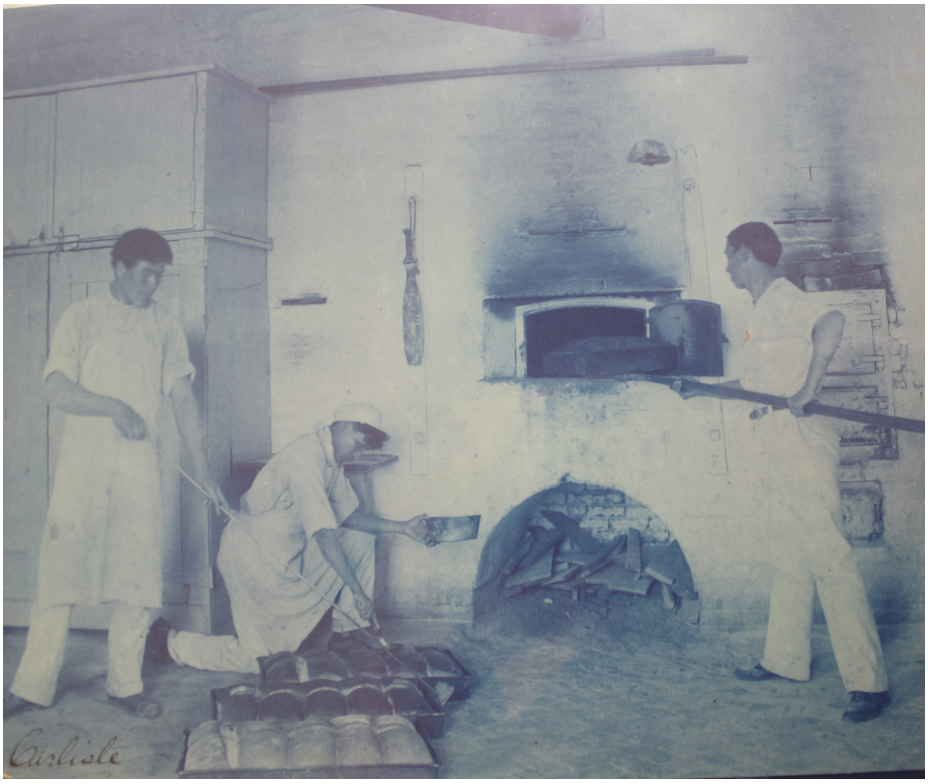


Image 5.12 Example of Data Representational of the First Emerging Theme from the Perspective of Context



Image 5.13 Example of Data Representational of the First Emerging Theme from the Perspective of Context



These three photographs (Image 5.11, Image 5.12, and Image 5.13) demonstrate how the use of wall space was used for tools of the trade, whether it be ovens and storage units or shelving for shoes and materials. The use of wall space became a functional space duplicating a similar space to that seen in industry for which these students were learning.

Image 5.14 Example of Data Representational of the First Emerging Theme from the Perspective of Context



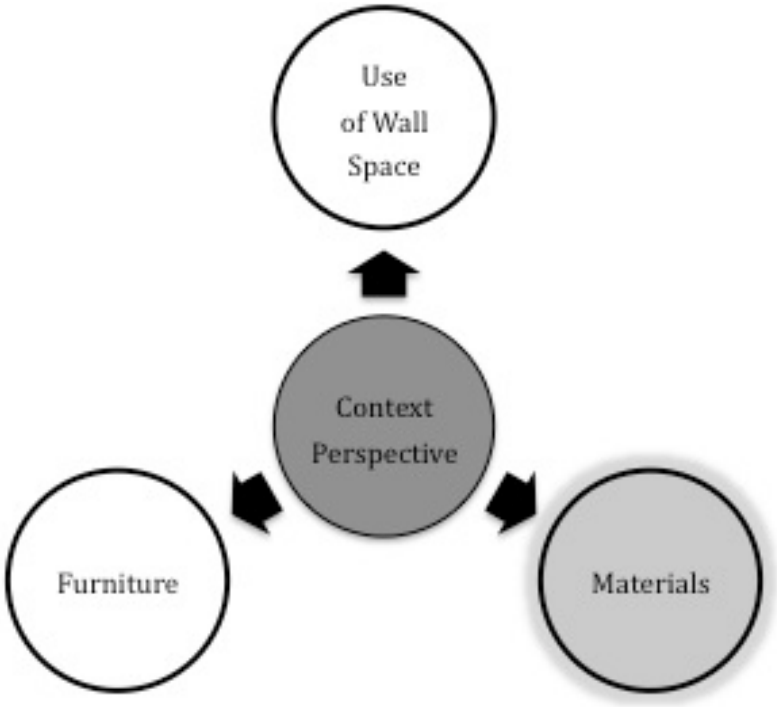
Similar to the previous images, the wall space of this classroom (Image 5.14) serves as an accessible storage for tools necessary to be utilized when the need arises.

Therefore, as seen in these photographs (Image 5.1 through Image 5.14) the wall space in classrooms was utilized for school tools and resources as well as real-world tools and resources. During the open-coding process, saturation of codes revealed a familiar need to use wall space within a classroom.

Second Contextual Theme: Materials

The second theme from the perspective of context that emerged was the presence of similar types of materials within the environment of a school. When coding, the researcher became saturated with visual codes demonstrating a familiar representation of materials within the context of a classroom.

Figure 5.4 Second Emerging Theme from the Perspective of Context



Within the photographs in the data collection, the researcher viewed similar materials representational of school and learning. This representation was evident in all category continua (utilized in layer 1 of analysis). In addition to being visible in photographs in the early 1900's through the late 1950's, materials were also a contextual component of urban and rural settings. Materials were seen in classrooms of wealth and poverty. Even active and passive classrooms demonstrated a context where materials were visible. Materials such as books, papers, charts, posters, pencils, and chalk, etc. saturated the open-coding process of the photographs of

American schools. Again, these images were coded as an environment of school due to the nature of these objects and items not being utilized in a similar context in environments outside of school. The following photographs provide examples of the researcher's findings.

Image 5.15 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



This photograph (Image 5.15) demonstrates the use of materials by students sitting at desks as well as students utilizing the chalkboard space. Students sitting at desks used materials such as books, paper, and a paper measurement tools. Students standing at the chalkboard utilized materials such as paper measurement tools and chalk. This demonstrates the visual representation of materials being a contextual component of a classroom in the early 1900's.

Image 5.16 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



Image 5.17 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



The two photographs above (Image 5.16 and Image 5.17) exemplify how the classroom context provided materials such as chalk and chalkboard to demonstrate learning as well as materials such as individual books and papers for students to use as directed by the teacher. The image below (Image 5.18) as well as the following two photographs (Image 5.19 and Image 5.20) demonstrate the use of materials by providing numerous copies of text for students to follow along either in a small group (See Image 5.19) or as a whole class (See Image 5.20).

Image 5.18 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



Image 5.19 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



Image 5.20 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



Image 5.21 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



Similar to the previous photographs, this classroom photograph (Image 5.21) exemplifies the availability of materials such as individual books, paper, pencils, notebooks, etc. for students to individually follow along with the teacher-directed learning or document learning.

Image 5.22 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



In addition to material such as books, Image 5.22 exemplifies the use of interactive charts as a instructional context for learning. In the following two photographs (Image 5.23 and Image 5.24) it was visible that materials such as papers and workbooks were present within the context of a classroom and most likely became products of learning that was returned to or checked by the teacher. This is demonstrated in the following photographs as the student turned in papers (Image 5.23) and the teacher places sticker on the workbook page as students wait with her/his head on the desks (Image 5.24).

Image 5.23 Example of Data Representational of the Second Emerging Theme from the Perspective of Context



Image 5.24 Example of Data Representational of the Second Emerging Theme from the Perspective of Context

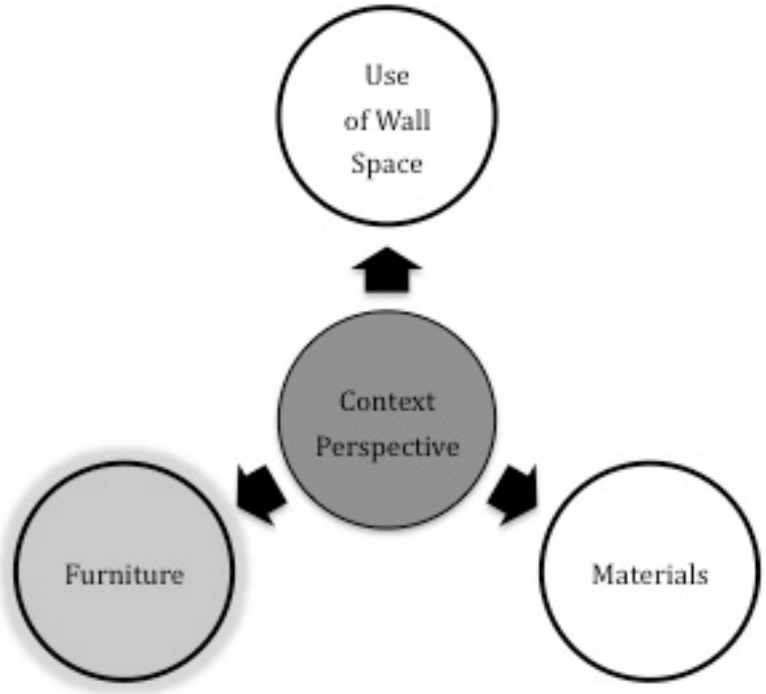


As demonstrated in the above photographs, specific materials are a contextual factor of these images of the American classroom setting between 1900-1959. Whether it be multiple copies of books and workbooks, instructional charts, notebooks and pencils, or chalk for writing on the chalkboard—similar and familiar materials were present in the context of the classroom.

Third Contextual Theme: Furniture

The third theme that emerged from the open-coding process within the perspective of context was the type of furniture within a classroom environment. Again, this theme was evident among images in all of the context category continua established in the first layer of analysis.

Figure 5.5 Third Emerging Theme from the Perspective of Context



Within this third theme from the perspective of context, desks, chairs, desk/chair combinations, table/chairs combination, workbench/bench combination, as well as teacher desks were the typical furniture saturating the photographs of this collection.

Image 5.25 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Image 5.26 Example of Data Representational of the Third Emerging Theme from the Perspective of Context

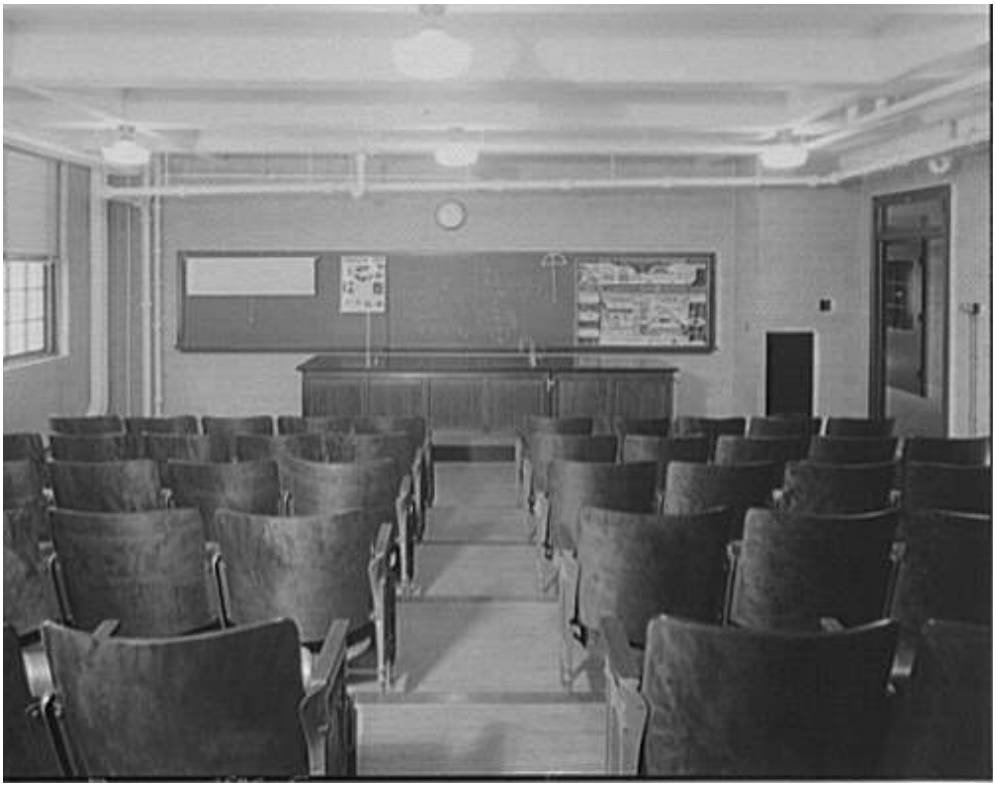


Image 5.25 and Image 5.26 provide examples of the representation of folding chairs as functional and typical furniture seen in images within the data collection. One row of chairs were positioned in rows and not connected to the floor allowing for multiple arrangements, where as the second image of chairs were connected to the floor limiting the manipulation of furniture.

Image 5.27 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Image 5.28 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Image 5.29 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



The three photographs above (Image 5.27, Image 5.28, and Image 5.29) demonstrate the use of connected desk and chair type furniture as well as chairs with an attached desk as typical furniture seen in the context of a classroom within the images presented in this data collection. The nature of these connected desk and chairs do not allow for individualized manipulation of furniture, but rather the student must conform or adapt to the piece of furniture.

Image 5.30 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Image 5.31 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Image 5.32 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Other types of furniture seen in the photographs are work benches, stools, and long narrow tables. The three above photographs exemplify furniture seen within the context of the classroom represented within the photograph collection. Image 5.30 and Image 5.31 demonstrate the use of benches or stools in combination with a work bench type furniture in an industrial setting. Images 5.30 and 5.31 demonstrate the use of stools or benches not shared with peers but rather individual seating and that could be individually manipulated. Image 5.32 shows how a similar bench and work bench type furniture was used by young girls in a pencil and paper type activity. This image demonstrates the lack of ability for individual students to manipulate furniture and space.

Image 5.33 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Image 5.34 Example of Data Representational of the Third Emerging Theme from the Perspective of Context

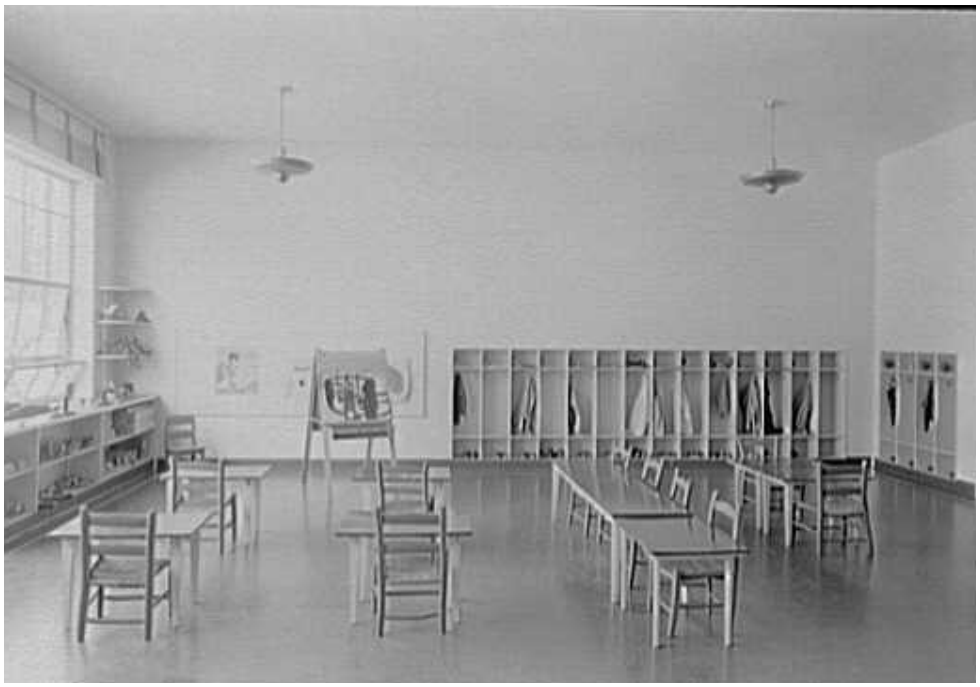


Image 5.35 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



The three photographs above demonstrate a desk and chair type of furniture visible in images within the data collection. Image 5.33 demonstrates the use of furniture allowing two students to sit side-by-side at one desk with individual manipulated chairs. Whereas Image 5.34 provides an example of the desk and chair combination allowing one student to sit in isolation similar to the type of furniture in Image 5.35. Desk and chair sets were common visuals within the context of the American classrooms.

Image 5.36 Example of Data Representational of the Third Emerging Theme from the Perspective of Context

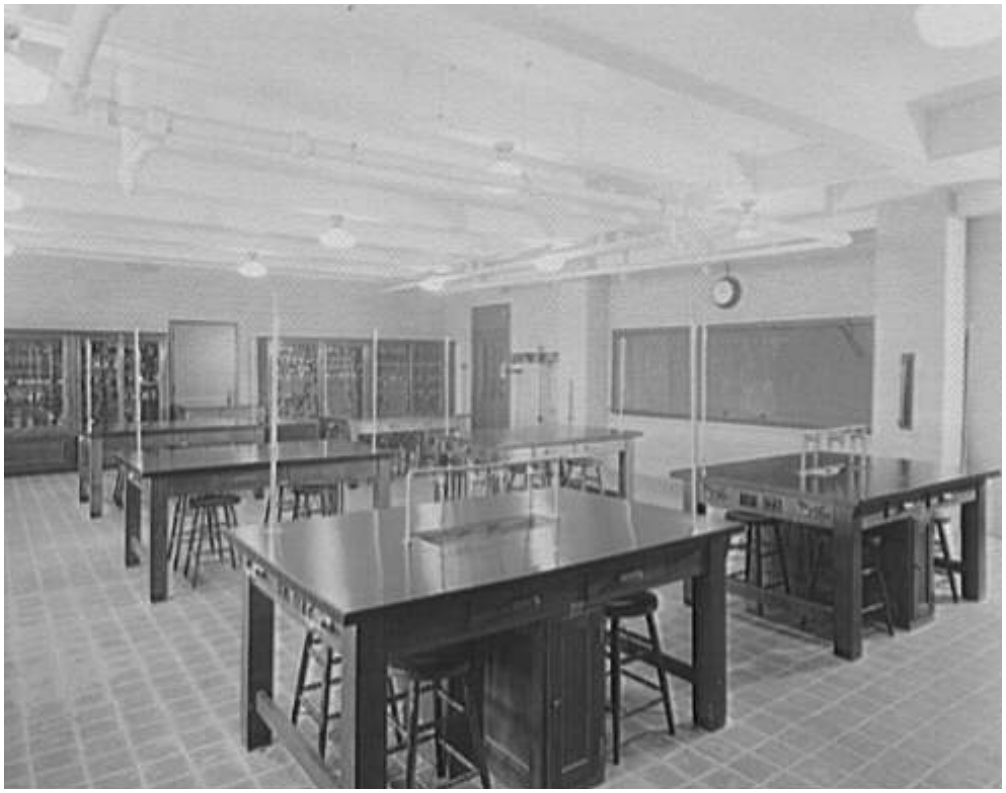


Image 5.37 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Although not a majority, tables (Image 5.36 and Image 5.37) were also present in the context of various classrooms presented in the data collection. As presented in the two photographs above, Image 5.36 demonstrates tables attached to the floor with stools that can be moved and manipulated in their placement. Whereas, Image 5.37 demonstrate tables and chairs that could be arranged and manipulated as they are not attached or connected to the floor.

Image 5.38 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



Image 5.39 Example of Data Representational of the Third Emerging Theme from the Perspective of Context



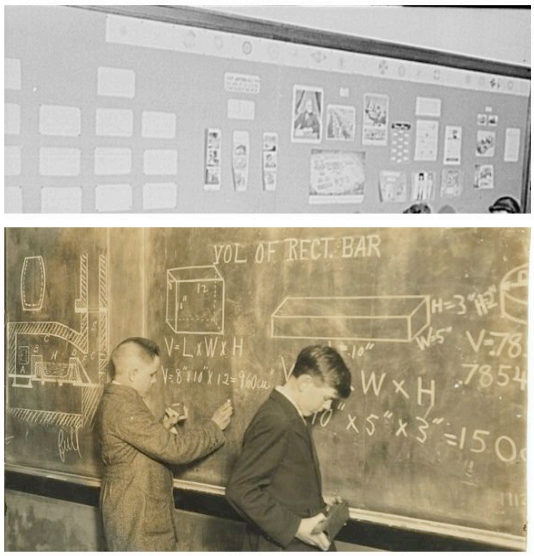
Another piece of furniture (Image 5.38 and Image 5.39) that could be seen within the context of American schools was a teacher's desk. Teacher's desks were located at the front or side of the classroom environment.

The images presented within the first perspective—context— were examples of visual evidence the researcher found within the whole data collection of the emerging themes specifically with viewing through the perspective of context. A reoccurring and predictable contextual element within a classroom environment would be the use of wall space, materials within the environment, and types of furniture within the environment of a classroom.

Emerging Icons Present in the Perspective of Context Themes

Visible icons emerged from the established context themes. The researcher found that images within the data collection possessed similar signs that became repetitive and familiar as images were viewed through the lens of context. Due to these signs being present frequently among the images throughout the 1900's to the late 1950's, the researcher identified these signs as possible icons of schooling in the context of American schools.

Figure 5.6 Examples of Icons Presented in the First Theme from the Perspective of Context



Within the context of a classroom, icons such as a chalkboard or bulletin board would be iconic visuals representative of classroom wall space. These, presented in Figure 5.6, emerged from the use of wall space theme within the perspective of context. The denotation such as bulletin boards displaying teacher and/or student work visually represented the context of schooling and communicated a space for teachers to instruct or display important and relevant content for students to reproduce and demonstrate as directed by the teacher. The connotation allowed for further reflection upon these icons through the lens of critical theory. The content could most likely be a prescribed curriculum of an authoritarian perspective and assimilated upon the students within the context of the classroom to reproduce a product mimicking the context presented on the walls of the classroom context. This banking approach is demonstrated in the replication of objects, images, and content.

Figure 5.7 Examples of Icons Presented in the Second Theme from the Perspective of Context

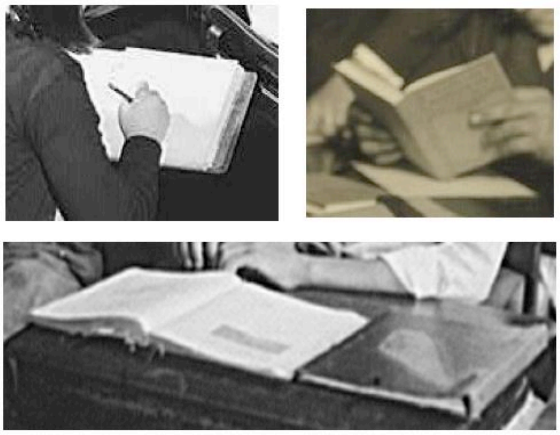


Figure 5.7 presents the iconic visual presented in the environment of a classroom, specifically emerging from the contextual theme of materials within the classroom. These visual signs (denotations) presented themselves in the icons of a pencil and paper, book, and notebook

or workbook nature. Once again, these icons sent the message (connotation) that learning was directed by the published and printed material authorized and presented by the instructor to be reproduced and consumed by the student.

Figure 5.8 Examples of Icons Presented in the Third Theme from the Perspective of Context



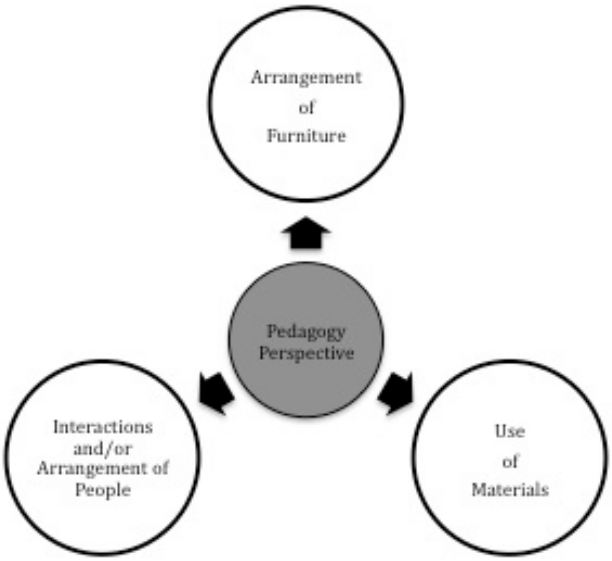
The final set of icons that emerged from the perspective of context were icons that represented the furniture within the context of a classroom. (See Figure 5.8.) Iconic visuals (denotations) such as desks and chairs were consistently visible within the images of this collection. Whether it be the connected desk, a bench and desk set, a chair with a desk attachment, or an individual desk and chair set, these became iconic representation of schooling within a classroom setting. This type of iconic furniture sent a message (connotation) that learning was stationary, independent, and isolated. Additionally they presented a work-space limited to the boundaries of the specific desk and chair. Typically this icon was made of metal framing and wood or plastic surfaces; these were cold and hard in nature, again communicating discomfort, the need for an erect posture, and limited mobility. No matter what style or

construction, the icon of a desk and chair became an unconscious element that registered in the researcher's mind of an object established and utilized in a school setting.

Emerging Themes through the Perspective of Pedagogy

Three themes emerged during the open-coding process when the researcher viewed the data collection through the lens of the perspective of pedagogy. These were arrangement of furniture, use of materials, and interactions and/or arrangement of people. The following images are examples of images saturating the 1,812 images in the data collection. These images represented photographs across the category continua established in the first layer of data analysis.

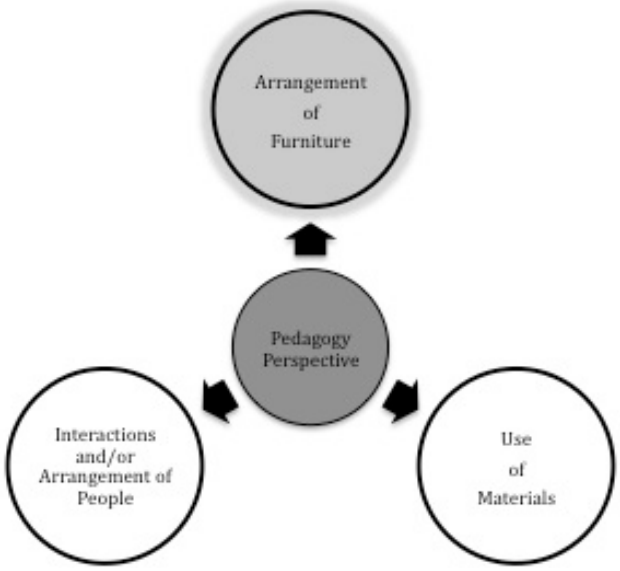
Figure 5.9 Emerging Themes from the Perspective of Pedagogy



First Pedagogy Theme

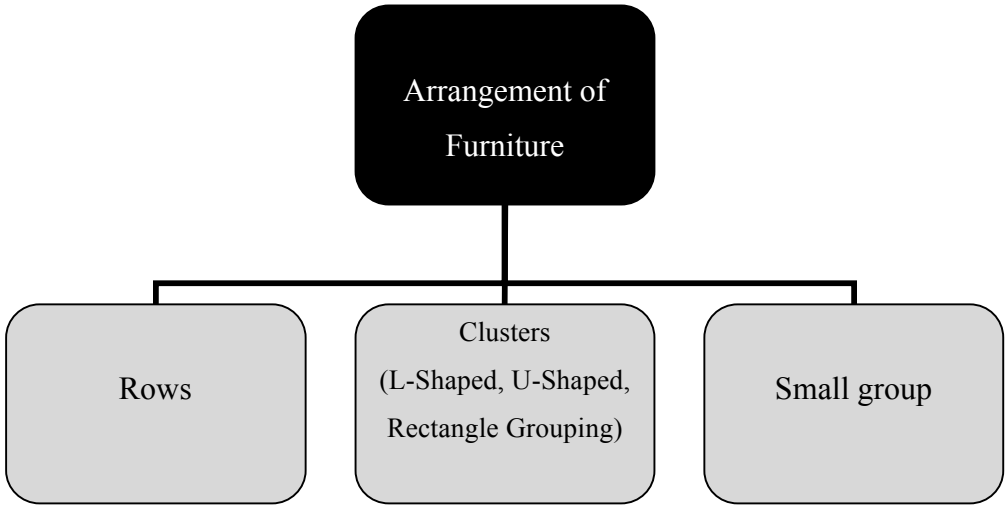
The first theme emerging in the perspective of pedagogy was the arrangement of furniture within the context of the classroom environment. (See Figure 5.10.)

Figure 5.10 First Emerging Theme from the Perspective of Pedagogy



Therefore, the pedagogy was visually reflected in the arrangement of desks, chairs, or tables, etc. A typical example of how pedagogy was demonstrated was in the arrangement of furniture. Desks and chairs were positioned in rows, clusters, or small groups. (See Figure 5.11.)

Figure 5.11 Three Categories within the First Emerging Theme from the Perspective of Pedagogy



Within the second layer of analysis, the researcher focused on the visual criteria and visual signs rather than specifically analyzing the types of pedagogy being utilized within the

captured image. Therefore, the below analysis findings reflect the visual signs that could trigger thoughts of pedagogy and approaches to education.

Image 5.40 Example of Data Representational of the First Emerging Theme from the Perspective of Pedagogy



Image 5.41 Example of Data Representational of the First Emerging Theme from the Perspective of Pedagogy



Image 5.42 Example of Data Representational of the First Emerging Theme from the Perspective of Pedagogy



Image 5.43 Example of Data Representational of the First Emerging Theme from the Perspective of Pedagogy



As demonstrated in the above photographs, pedagogy is reflected in the arrangement of desks and chairs into row formations facing the teacher who is at the front of instruction. Image 5.40 shows how children stood in the same formation as the rows of connected desks and chairs for instructional purposes. Image 5.41 presents a graduated level of rows of chairs as students faced the focal point of the instruction, file projector and instructor. Again, Image 5.42 and Image 5.43 demonstrate two classrooms—male in one and female in another— where students sat in arranged rows of desks for the purpose of listening to the instructor positioned at the front of the room.

Another arrangement of furniture reflecting pedagogy that was visible in the photographs presented in the data collection was clusters of desk in formations demonstrated in the three images shown below.

Image 5.44 Example of Data Representational of the First Emerging Theme from the Perspective of Pedagogy



Image 5.45 Example of Data Representational of the First Emerging Theme from the Perspective of Pedagogy



Image 5.46 Example of Data Representational of the First Emerging Theme from the Perspective of Pedagogy



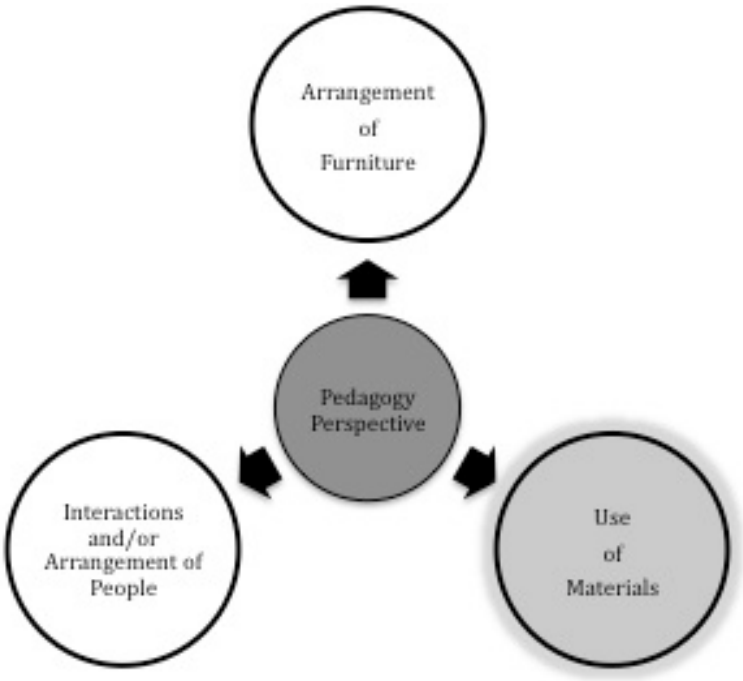
In Image 5.44 the desks have been arranged into three clusters of six desks. This arrangement of desks and chairs visually communicates a more collaborative pedagogy. Image 5.45 and Image 5.46 demonstrate an arrangement of desk and chairs in clusters and L- and U-shaped formations. This series of photographs represented a sample of the first theme to emerge from the data collection when looking through the perspective of pedagogy. Arrangement of furniture was one visible sign to trigger thoughts of a specific pedagogical approach within the context of the classroom.

The researcher was left wondering whether the pedagogy visible within the arrangement of furniture was the same pedagogy reflected in the use of materials and interactions and/or arrangement of people within a given classroom. This is an example of a disconnect between the visual arrangement of the furniture and the expected or considered pedagogy. Therefore, the denotation of a desk cluster or grouping triggered a connotation of collaboration. However, the denotation of students working individually at individual desks triggered a connotation that the pedagogy did not reflect a constructivist approach as there was not a visual sign of collaboration.

Second Pedagogy Theme

The second emerging theme saturated the photographs during the open-coding process under the lens of a perspective of pedagogy was the use of materials.

Figure 5.12 Second Emerging Theme from the Perspective of Pedagogy



Within the photographs presented in the data collection, coding became saturated in the use of materials such as the chalkboard, books, and tools or resources. Therefore, when viewing images through the perspective of pedagogy, the use of the materials that were presented in the contextual sense could trigger a visual demonstration of pedagogy.

Image 5.47 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy



Image 5.48 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy



As demonstrated in these first two photographs (Image 5.47 & Image 5.48), as well as the photograph that follows (Image 5.49), materials used were real-world materials employed by trade and industry. Materials in these environments were used as individuals practiced and crafted her/his trade. This led the researcher to question whether the pedagogy presented within these images value specifically the product of the trade or the process of the craft.

Image 5.49 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy



Within this photograph, girls learn a trade using the materials necessary for sewing and mending. Unlike Images 5.47 and Image 5.48, the context presented in Image 5.49 does not communicate that the environment is used solely for textile, but rather the pedagogy reflects a need to understand a lesson in sewing. The denotation of fabric and sewing instruments triggers the connotation that the pedagogy values the craft of sewing and mending.

Image 5.50 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy

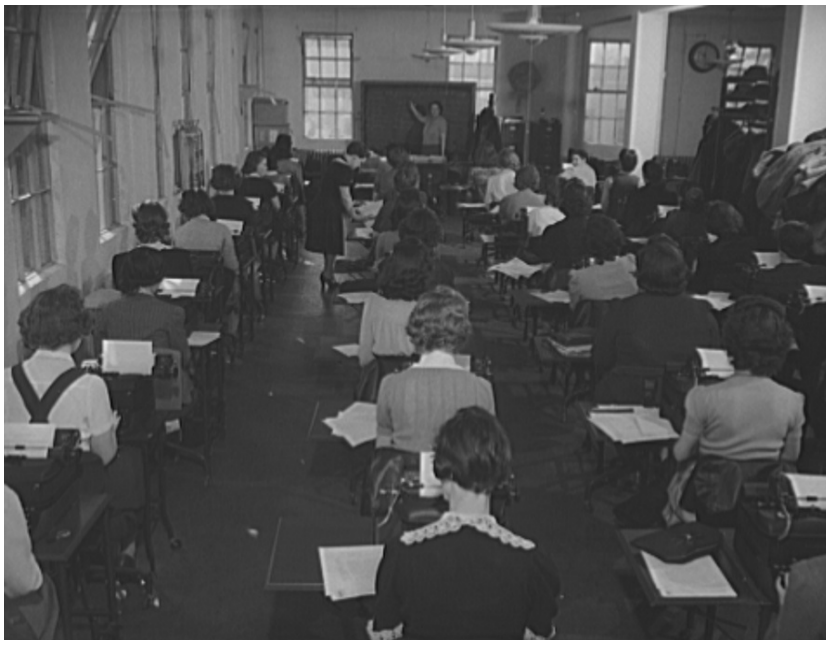


Image 5.51 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy

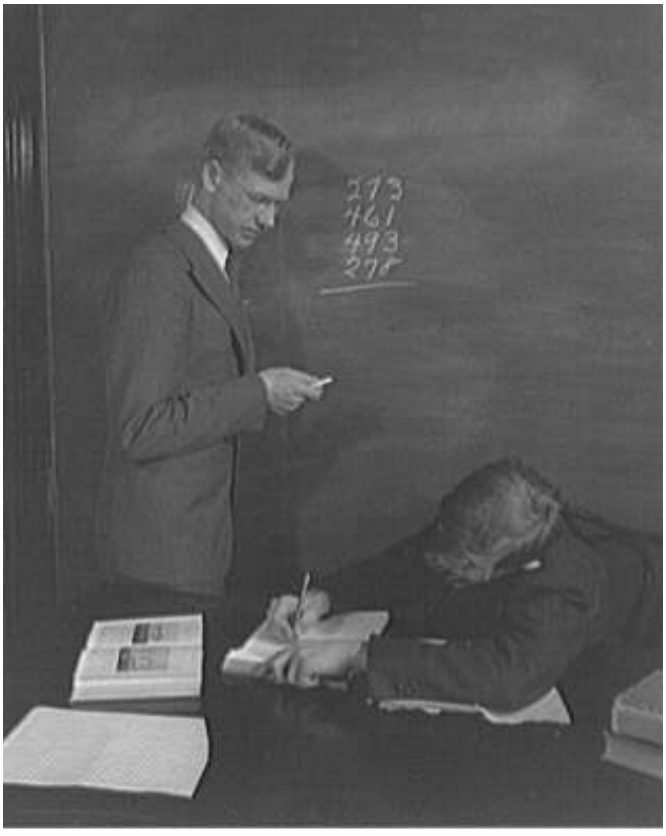


Image 5.50 demonstrates the use of materials and how all students have the same instructional materials as well as individual typewriters for each student. Image 5.51 presents a visual that demonstrates a pedagogy that values the use of textbooks. These photographs could provide visual examples of Paulo Freire's notion of banking, as the materials were used to assimilate and provide specific information for retention and memory.

Image 5.52 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy



Image 5.53 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy



Image 5.54 Example of Data Representational of the Second Emerging Theme from the Perspective of Pedagogy



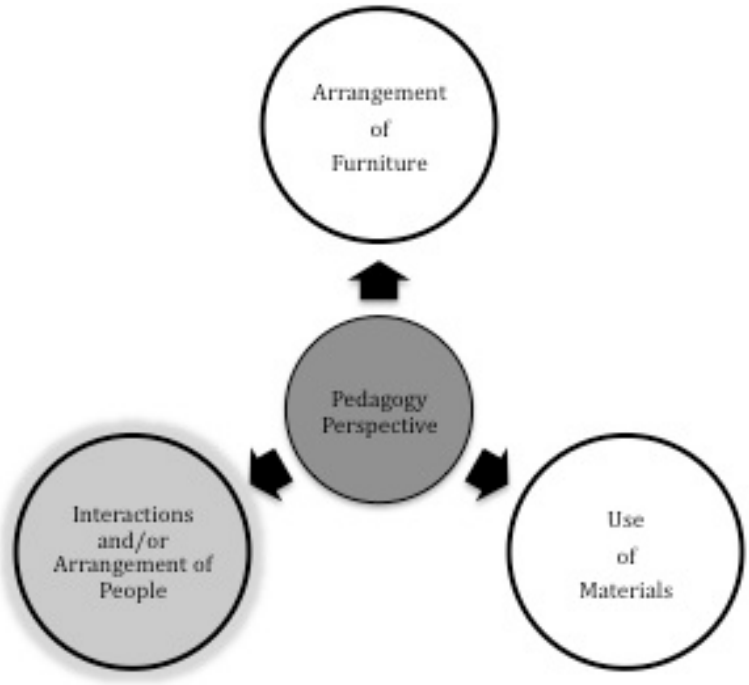
A few photographs (Images 5.52 -5.54) demonstrate the use of material within the context of a classroom, in a manner that may communicate some elements of a constructivist perspective. Image 5.52 demonstrates the use of materials as presented in the denotation of a young boy adding to a drawing posted on a chalkboard full of writing and other instructional materials providing a connotation of a pedagogy that allows for creativity and constructing understanding through discover. Images 5.53 and 5.54 demonstrate where the student begins to control the purpose and organization of instructional material. This presents a denotation of different materials being used by different children. Therefore, providing a connotation of a pedagogy that allows children to choose materials and how the materials are manipulated. This sends the message that students are in control of constructing an understanding.

Within the second theme from the perspective of pedagogy, the researcher found evidence that the use of materials and materials available reflected evidence of the pedagoglogical approach used within the classroom context.

Third Pedagogy Theme

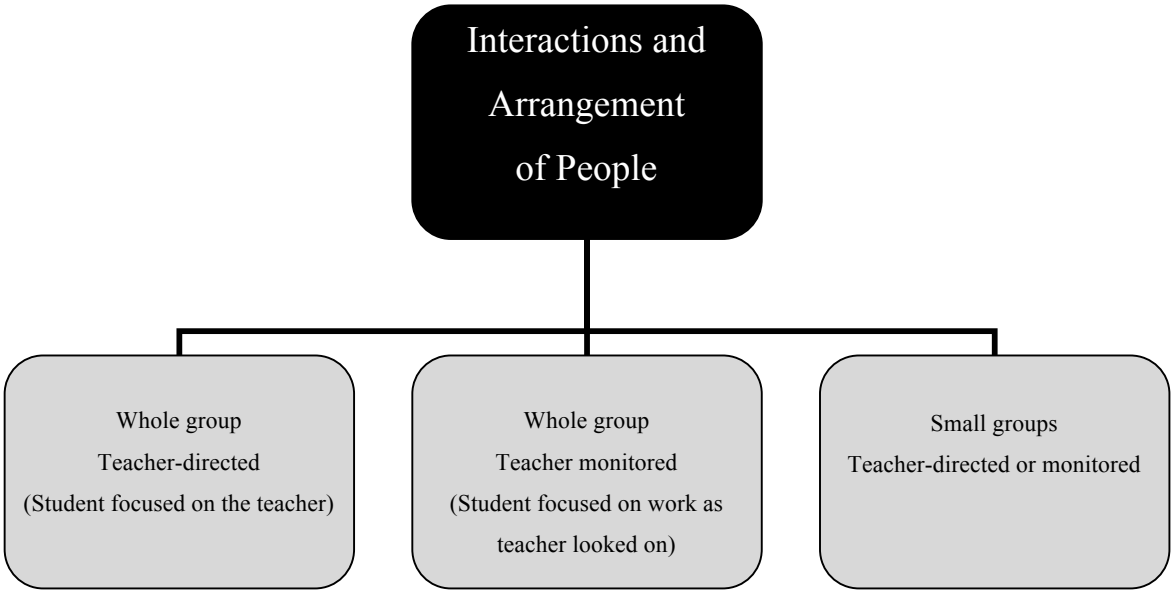
The third theme that emerged from the photograph collection when viewed in the perspective of pedagogy was the interactions and arrangement of students and/or teachers.

Figure 5.13 Third Emerging Theme from the Perspective of Pedagogy



The images within the data collection were saturated with visual interactions and the arrangement of people. This was defined by the placement of people within the context of the classroom. Due to these being still images, it was unclear as to what happened before and after the image was captured. But within the captured moment, a familiar arrangement and interaction between both teachers and students was shared among the photographs in the data collection.

Figure 5.14 Three Categories within the Third Emerging Theme from the Perspective of Pedagogy



The following three images (Image 5.55, 5.56, 5.57) demonstrate an interaction between the teacher and the students as the teacher gives information and the students sit in chairs to receive the information. This banking occurred in different arrangements of people, whether it be in rows of desks, chairs, or at tables, interactions occurred allowing the researcher to see evidence of pedagogy. The perspective of pedagogy visually presented itself in three types of interactions. (See Figure 5.14.)

Image 5.55 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.56 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.57 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Within the images presented within the data collection there were images of interactions and arrangement of people that provided a space for hands-on crafting and constructing within the trade schools and preparation for industry.

Image 5.58 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.58 demonstrates an arrangement of individuals, as students crafted their products the teacher was positioned to provide guidance and support. Or as demonstrated in the following two photographs (Image 5.59 and Image 5.60), the arrangement of students allowed the teacher to monitor and assist individual students while students worked independently.

Image 5.59 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.60 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



The following photographs (Image 5.61- 5.63) demonstrate further examples of the interactions and arrangement of people as teachers walked among the students to check student work as the students worked independently or waited for further direction.

Image 5.61 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.62 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.63 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Within Image 5.61 young children work on individual activities as the teacher checks or helps an individual student. A denotation is presented in a child playing on a chair, sending a message (connotation) that the child is waiting for instructions or assistance. Image 5.62 presents a teacher talking with an individual student positioned in a cluster of students sitting at desks with their heads down on the desk surface. The denotation of student heads placed on the desk surface sends a message (connotation) that the teacher is using a pedagogy that asks students to wait for the teacher before moving on to the next instructional task. This also communicates a teacher-directed pedagogy. Image 5.63 presents rows of individual desk with students working independently as the teacher stands near an individual student. The denotations suggest the connotation of a pedagogy that promotes monitoring and facilitating of individual work. It is unclear as to whether the work is student-directed or teacher-directed.

Another interaction and arrangement of people within the images of this data collection was the evidence of a teacher working with a small group or individual in one part of the room, while other students worked independently at individual desks. This is visible in the following two images. (See Images 5.64 and 5.65.)

Image 5.64 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.65 Example of Data Representational of the Third Emerging Theme from the Perspective of Pedagogy



Image 5.64 demonstrates a teacher working with a small group of students sitting in a cluster of chairs as other students work independently in a desk cluster. The denotation of the students being arranged in a cluster of desk sends the message that this should be a collaborative activity. However, the denotation of students working independently in individual workbooks sends a message (connotation) that this is not a collaborative approach to learning—individual accountability is valued. Image 5.65 demonstrates a teacher working independently with a student as other students work at their sets of desks arranged in rows.

These images demonstrate the representation of how the photographs within the data collection shared a common theme of interactions and arrangement of people within the context of a classroom that could shed light on the pedagogical approaches utilized within the classroom of its time. Because this is a study of visual signs presented in photographs of schooling, the

researcher did not analyze the types of pedagogy presented in each of the classroom images, but rather the signs and icons that sent visual triggers to possible pedagogical ideas and approaches.

Emerging Icons Present in the Perspective of Pedagogy Themes

Visible icons emerged from the established themes from the perspective of pedagogy. The researcher found that images within the data collection possessed similar signs (denotations) that became repetitive and familiar as images were viewed through the lens of pedagogy. Due to these signs being present frequently among the images throughout the 1900's to the late 1950's, the researcher identified these signs as possible icons of schooling in the pedagogy within American schools.

Figure 5.15 Examples of Icons Presented in the First Theme for the Perspective of Pedagogy



The first set of icons that emerged from the arrangement of furniture theme were rows and clusters. Denotations such as rows of chairs or desks communicated the approach to schooling. The message preserved from this arrangement (rows) suggested to the researcher that learning was accomplished through a lecture approach and rows were a convenience for the teacher to quickly access the stationary students who occupied the desks or chairs. A teacher-centered pedagogy emerged as a connotation from the rows of desk and chairs within the collection of photographs.

Figure 5.16 Examples of Icons Presented in the Second Theme for the Perspective of Pedagogy



The second set of icons that presented themselves in the second theme emerging from the perspective of pedagogy was the use of materials. Icons (denotations) such as pencil and paper, posters, notebooks and books saturated the images reviewed by the researcher. Connotations of these denotations suggest that learning was accomplished through assimilation of information gained from printed and published materials. A banking approach emerged as a majority of students used the same materials duplicated for individual use.

Figure 5.17 Examples of Icons Presented in the Third Theme for the Perspective of Pedagogy



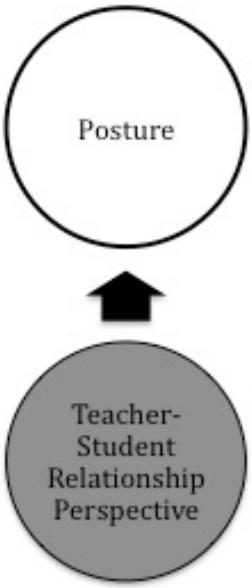
The third set of icons that emerged from the third theme presented through the lens of pedagogy, specifically viewed the arrangement and interactions of teachers and students. Icons (denotations) such as students sitting at desks viewing the teacher at the front of the room,

students standing around the teacher, and students working on a teacher-generated task. This sent a visual message (connotation) to the researcher that the interactions were authorized by the teacher and responded to by the students. When prompted, students should respond to the teacher prompt, question, or task in the appropriate manner. These visuals communicated a message to the researcher that further reflected a banking system and teacher-centered pedagogy.

Emerging Theme through the Perspective of Teacher-Student Relationship

One overarching theme emerged within the visual context of the photograph collection when viewing through the perspective of teacher-student relationship. This was the act of posture.

Figure 5.18 Emerging Theme from the Perspective of Teacher-Student Relationship



Teacher-student relationships was visually demonstrated by the specific posture of both teachers and students. Depending on the posture, the viewer understood the role of the individual. This is demonstrated in the following image.

Image 5.66 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



It is visible as to who is the student and who is the teacher within Image 5.66. How does the posture of these individuals provide further understanding into the presence and role of the individuals within the context of a classroom? The following images depict postures rarely seen outside of the context of a classroom. Children do not naturally posses these postures and neither do adults. It appears to be a learned posture in the context of a schooling experience.

The role of student possesses a similar posture throughout the photographs presented from early 1900 to late 1950's. Within the photographs, it was apparent who were students and which individuals were teachers. It was the postures of these individuals that provided visual cues to the researcher of such roles. The first role explored and analyzed will be the role of the student and the postures that allowed the researcher to place these individuals in the role of a student.

The first posture of a student was the erect posture as a student sat at a desk and chair. Hands were usually placed on the top of the desk or in one's lap, feet were on the ground parallel

in nature, stationary side-by-side, and the student's face looked in the direction of instruction. This posture was seen throughout the images of these school photographs to the extent that it became a familiar posture and presence. The following photographs (Images 5.67- 5.70) provide visual evidence of this student posture.

Image 5.67 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.68 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.69 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.70 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.67 demonstrates a posture of a student who is expected to quietly listen to the information provided by the authority. In this case, there is not a visual sign of the individual of authority, as the photograph did not capture this individual. Due to the denotations of the rows of desk and individual students sitting in the same manner of the student featured in this image, the connotation would be that the teacher is talking and the student is to listen while assuming a posture of submission. Image 5.68 demonstrates the repetition of student posture as each student assumes a posture of watching and listening—receiving. Denotations such as students' backs are pressed against the back of the chair, hands are in the individual's lap, and faces are directed specifically at the individual of authority. These denotations communicate (connotations) such as the student is the receiver of information, students are submissive, and are to follow the teacher's directions as well as take in the information provided by the teacher.

Image 5.69 and Image 5.70 provide a slight variation in the denotation. For example, the students' hands are placed on the top of the desk rather in the students' laps (Image 5.69) and the students' bodies are rotated to follow the visual line and instruction of the teacher (Image 5.70). However, the connotations from these varied denotations are the same. This is a context in which the students are the receivers of information and the teacher is the giver. These postures (denotation) communicate a teacher-student relationship that is teacher-centered and teacher-controlled.

A posture that extended a listening type posture was the response to the teacher's inquiry. This was exemplified in the raising of the hand posture demonstrated in images in the 1950's. Below is an example of this student posture. (See Image 5.71.)

Image 5.71 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.71 demonstrates a denotation of a single hand raised sending the message that students have to be directed to respond but in a manner that is not interruptive or aggressive. Connotations taken from this image, suggest that the student is submissive and waits for permission to orally respond, placing control on the teacher and promoting a teacher-centered experience.

Another posture visible in the student role was the posture demonstrated when the student works on a task. The following images (Images 5.72-5.76) demonstrate this posture as the student leans over her/his work: the bodies slightly erect, heads slightly tilted and intentionally focused on the paper on the desk, and arms and hands placed on the desk surface tending to the pencil and/or paper task at hand.

Image 5.72 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.73 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.74 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.75 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.76 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Due to the nature of the photograph, other than the nature of a pencil paper activity, it is challenging to visually see specifically what is being produced using a pencil and paper. Due to the denotation of all students using the same posture, it visually sends the message that this is a banking pedagogy in which the teacher is the giver of information and the students must recall this information to demonstrate retention and understanding. Image 5.67 through Image 5.76 exemplify how student postures became familiar visual signs within the data collection viewed by the researcher. Postures represented the role and responsibility of the student within the classroom setting.

In addition to the student's posture, teachers had a specific posture that asserted their role as teacher. Again, these were postures not seen naturally among adults. The first posture demonstrated by teachers was an erect posture of authority, as demonstrated in the following images. (See Images 5.77-5.80.) The denotations of these postures send the message (connotation) that the teacher was the giver of knowledge and information; the teacher should be listened to by the students.

Image 5.77 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.78 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.79 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship

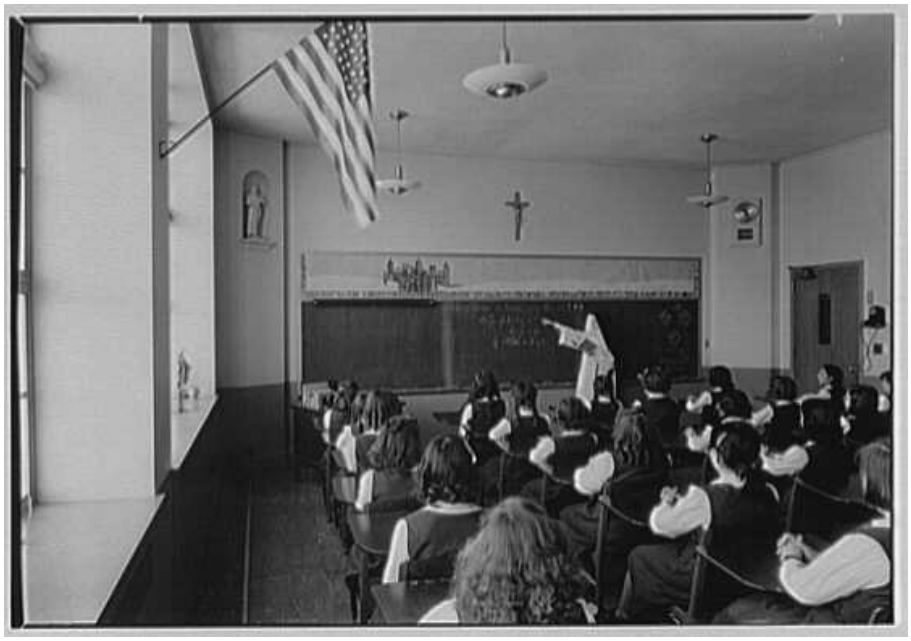


Image 5.80 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.77, Image 5.78, and Image 5.79 provide evidence of a posture of authority. Denotations of erect posture, straight back, and pointing finger suggest that this person has authority and important information that needs to be heard and recalled. Image 5.80 provides an example of how the teacher non-verbally communicates through a posture of authority. This is communicated through denotations such as the erect body, attentive eye contact with students, and the extended finger over her lips. Universally, within the context of school, this displays the sign for quiet.

Another posture demonstrated by teachers within the data collection was a slightly bent posture, leaning in to correct, support, or redirect students as they worked on a task at hand. Usually this posture towered over the student. The following images (Images 5.81- 5.83) demonstrate this posture.

Image 5.81 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.82 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.83 Example of Data Representational for the Emerging Theme from the Perspective of Teacher-Student Relationship



Image 5.81 displays this posture as the teacher leans in to assist a young child sitting among a row of children at a long table. As seen in Images 5.82 and 5.83, this posture communicates both a nurturing and authoritative position depending on the facial expression and body language of either the student or the teacher at the time the image was captured. Image 5.83 demonstrates a nurturing and supportive role as the male teacher leans over to talk with the student sitting at the table. The body language appears to communicate a relaxed and nurturing role in both the student and the teacher. Whereas, in Image 5.83, the teacher's body and facial expression (denotation) communicates a more authoritative role. Denotations such as the student sitting with bent arms resting on the face, communicate a more submissive role. Image 5.66 through Image 5.83 demonstrated a posture presented as a familiar visual signs within the data collection. These denotations of posture send a message that the specific posture of the student or teacher can be an influential signal determining and communicating the role of the individual and the relationship between the teacher and student within the context of the classroom.

Emerging Icons Presented in the Perspective of Teacher-Student Relationship Theme

When looking consciously and specifically through the visual lens of teacher-student relationship there was a familiar posture (denotation) that was demonstrated by students and teachers through the collection of photographs. This icon, visible posture, communicated (connotation) the role of the individual in a given photograph as either a student role or a teacher role. The posture of the teacher and student provided subconscious awareness and understanding to the type of relationship between the student role and the teacher role. The teacher was the giver of information and the student was the receiver of information. (See Figure 5.19.)

Figure 5.19 Examples of Icons Presented in Theme for the Perspective of Teacher-Student



Conclusion

Following the placement of images within each of the four predetermined continua (Time-Period, Urban-Rural, Wealth-Poverty, and Active-Passive), the open-coding and semiotic analysis allowed the researcher to discover seven overarching themes within the data collection. These themes were identified after specifically viewing each of the 1,812 photographs through three perspectives. Therefore, the researcher first viewed 1,812 images through the lens of context. Second the researcher viewed the entire data collection again through the perspective of pedagogy. Finally, the researcher viewed all images once more through the lens of teacher-student relationship. Within each of these viewings, each photograph was individually coded for visual representation and signs of the three predetermined perspectives.

The researcher became saturated with three themes when viewing and coding visuals through the perspective of context. These three themes consisted of use of wall space, furniture, and materials. These identified themes signified the context of the environment within the given photograph as a space for schooling. When viewing and coding images through the lens of

pedagogy, the researcher discovered three themes. These themes presented themselves as arrangement of furniture, use of materials, and the interactions and arrangement of people (teachers and students). The three identified themes demonstrated a similarity among the approaches to directing and organizing a space determined as school. Additionally, the researcher discovered one overarching theme when viewing and coding the photographs within the perspective of teacher-student relationship. This theme presented itself in the form of posture. Students and teachers possessed a posture that signified the role of the individual.

From these emerging themes, icons were identified as possible visual representation for the context and actions associated with school. The researcher determined an icon most likely to appear in the context of a classroom was a desk and chair. An icon representation of pedagogy was the arrangement of a row of desk; and, a familiar icon representing the relationship between a teacher and a student was the teacher's erect posture at the front of the class and the student raising a single hand. This provided a systematic process for viewing and coding images of school allowed for further reflection of the visual messages and the purpose for the organization of these visuals within the context of a classroom or school experience.

Chapter 6 - Summary of Findings and Implications

Introduction

This chapter further discusses the research findings specifically responding to what we can learn about American schools, in the first half of the 20th Century from the Library of Congress's archived still images. This chapter also reveals what we can learn about the context, pedagogy, and teacher-student relationships in American schools during the first half of the 20th Century. Implications are explored, as well as the capacity of visual research in education.

Summary of Findings

Within the first layer of analysis, the researcher established that the images represented in the data collection provided a distribution of visual representation across all of the predetermined category continua (Time Period, Urban-Rural, Wealth-Poverty, Active-Passive). In addition to the representation, the researcher confirmed a similarity among the images and the placement of the photographs along the individual contextual category continua. Similarities were apparent through visual cues such as clothing, building materials, and other environmental factors.

This presence of similarity among images represented in this data collection, provided a deeper understanding and awareness of the effects visual signifiers and codes present themselves within the visual documentation of experiences in American schools. More importantly, similar and repetitive visual signifiers between the early 1900's through the late 1950's provided a foundation and a focus to begin further conversations about the unconscious meaning attached to the representation and misrepresentation of the contextual representation of images of schooling. This individual understanding impacts the progression and vision for future schooling in

American schools. Now that I have a deeper understanding of the visual themes and icons presented in this data collection, further exploration can elude to how these themes and icons discovered in historical images transfer and present themselves in current classrooms and images of schooling and the educational process.

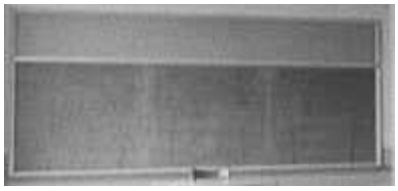
In the second layer of analysis, the researcher established the emerging visual themes that saturated the data collection. This was achieved by viewing the photograph collection through individual lens of the perspectives of context, pedagogy, and teacher-student relationship.

The perspective of context revealed visual cues such as the use of wall space, use of materials, and a common type of furniture in the images documented and categorized as images of classrooms in the United States. When viewing through the lens of a perspective of pedagogy, images categorized as classrooms in the United States shared common and similar visual cues such as the use of the classroom furniture, the use of the classroom materials, and the interactions and/or arrangement of people within the classroom environment. The lens of a teacher-student relationship perspective was used and the images revealed a common and familiar theme of posture. The images of teachers and students displayed a specific posture. It was a posture that was not necessarily utilized outside of the context of the classroom or educational environment.

Each of the themes within the second layer of analysis revealed visual icons in the context, pedagogy, and teacher-student relationship presented in the photograph collection. Each icon possessed denotations and connotations. (See Table 6.1.)

Table 6.1 Overarching Perspectives and Emerging Themes and Examples of Icons

Time Period

Perspectives	Themes	Icons
Context	Use of Wall Space	
	Materials	
	Furniture	
Pedagogy	Arrangement of Furniture	
	Use of Materials	
	Interactions and/or Arrangement of People	
Teacher Student Relationship	Posture	

Active - Passive

Urban - Rural

Wealth - Poverty

Consider how the conscious and unconscious use of the context, pedagogy, and teacher-student themes discovered within this study could impact the conversations and understanding of how teachers create a space for learning within the context of their individual classrooms. How do administrators respond and react to these contextual spaces? Are the themes and icons discovered within this research consciously encouraged? If so, why are they encouraged within the classrooms of the 21st Century? Do these icons of context, pedagogy, and teacher-student relationship dictate our philosophies or challenge our educational practices? Utilizing what I have learned through this process will also allow for further investigation of what elements within the visual culture of our schools communicate political acts and what messages are being sent by these visual signs. The foundational understanding of this study will allow for further investigate into what Giroux (2003) cautions,

> The first casualty is a language of social and political responsibilities capable of defending those vital institutions that expand the rights, public goods, and service central to a meaningful democracy. This is especially true with respect to public schooling and the debate over the purpose of education, the role of teachers as critical intellectuals, the politics of the curriculum, and the centrality of pedagogy as a moral and political practice (p. 74).

The context, pedagogy, and teacher-student perspective themes and icons discovered in this study can become a starting point for conversations among educators as they visually reflect upon the visual culture they have either created, or inherited, within their classrooms. This reflection could further identify the denotations and connotations of the context of their classroom as well as the visual signs of their pedagogy and teacher-student relationship. Becoming conscious of the visual culture will allow educators to understand that the

environment in which they teach continually communicates to students, parents, and community what is expected of them within the culture of school. Semiotic methodology and further research can provide a new lens in which to reflect and grow.

Gained Understanding When Viewing Photographs of American Schools from the First Half of the 20th Century

This research study has allowed the researcher to develop a deeper understanding of American schools, in the first half of the 20th Century, from the Library of Congress's archived still images. The researcher holds a better understanding of how visual elements within images of schooling in American schools can be interpreted as a purposeful means to being schooled or educated. How the viewer's interpretation impact the involvement, decision making, and future progress of education in the United States is up for question and deserves further research and attention. As W. J. T. Mitchell (1994) eludes, " . . . we still do not know exactly what pictures are, what their relation to language is, how they operate on observers and on the world, how their history is to be understood, and what is to be done with or about them" (p. 13).

A paradigm shift in thinking is needed. Rather than solely relying on established historical and philosophical textual understanding of approaches to education, a visual understanding can become a foundation for further exploration and research. Knowing that images of school within the first half of the 20th Century possess specific visual themes: the use of space (contextual); the manipulation of people and space (pedagogy); and, the visual presentation of oneself (teacher-student relationship) this allows for further questioning of how this new understanding can guide purposeful and conscious observations and analysis of the use and manipulation of classroom spaces as well as teacher-student interactions from a visual perspective.

Therefore, expanding on the textual understanding and documentation of the progression of education in the first half of the 20th Century, the researcher now holds a new perspective. Visual documentation, specifically photographs, can provide a new lens through which we understand and grow in creating a context for learning, aligning our pedagogy with the contextual elements of a classroom environment, as well as establishing a conscious understanding of our roles as teachers and students, and how these roles are modeled and communicated through our visual posture and presence within the new context of education.

This research study has provided further knowledge and understanding of how visual elements of a classroom (context, pedagogy, and teacher-student relationship) impact the interpretation of American schools during the first half of the 20th Century. It is important to note that the photographers of the images within the data collection were most likely "outsiders" to an educational environment and philosophical understanding of an educational process. A perspective Mitchell and Weber (1998) suggested needs to be explored by stating, "consider the ways in which photographers, as outsiders, might be seen to contribute to shaping the world of the insiders, teachers and students" (p. 197). This study provides a unique perspective for viewing and coding semiotic elements and icons.

Gained Understanding about the Context of American Schools from the First Half of the 20th Century when Viewing Photographs

By understanding that the context of American schools during the first half of the 20th Century possessed a common climate, specifically, in the use of wall space, similar furniture, and materials, the researcher has a new lens to view and analyze educational practices.

With this knowledge and understanding of visual themes that emerged from the context of a classroom, consider, how do the visual contextual elements found within this study,

impact—conscious and unconscious—interpretations of current and future practices of schooling? Additionally, through the design and analysis process of this study, the researcher has discovered a process for viewing photographs that systematically codes visual elements as well as establishes visual themes and icons represented within a collection of images. This same process can be applied contextually to various collections of images as well as critically viewed under various predetermined lens. Future investigations should explore images based on determined criteria would prompt further dialogue pertaining to the visual messages presented contextually within the visual culture of a classroom.

Gained Understanding about Pedagogy when Viewing Photographs of American Schools from the First Half of the 20th Century

Utilizing a visual lens to analyze the visual messages and representation of pedagogy in the American schools (specifically the first half of the 20th Century), the researcher has gained a deeper visual understanding of the embedded philosophies thoroughly and historically discussed through textual representation. The research provided a visual lens rather than a textual lens uncovering visual arrangements of furniture and people within a classroom.

Emerging themes revealed that materials were similarly utilized through many classrooms from the 1900's to the late 1950's. Although this study did not focus on historical educational philosophies reflected in pedagogy, as an educator, the researcher could elude to possible philosophies that drove the pedagogies within the visible context of these classrooms. Visually and collectively these images could communicate a Secular Traditionalist nature of educational philosophy. "School and society are still separated and there is little relationship between what transpires in the classroom and life on the outside, although a transfer of training is necessarily assumed to take place" (Howick, 1980, p.25). Glimpses of progressivism could be

discovered in the arrangement of people and furniture within a classroom context. From the researcher's perspective, repetition of textbook, paper/pencil tasks, and rows of furniture do not necessarily send a message of progressivism and constructivist philosophies. Due to the nature of the study, conclusions cannot be drawn specifically to whether or not the materials and content of learning were child-centered in nature. Further research can investigate how and why these icons reveal themselves in American schools and the purpose they serve in current practice as well as the philosophies that influence the pedagogy and practice of the instruction presented within an image being analyzed.

Icons and visual codes do represent American schools' pedagogies during the first half of the 20th Century. These visual codes and icons continue to communicate "many principles and practices remained unchanged and others simply were modified to suit a more modern society" (Howick, 1980, p. 24). This awareness and knowledge will allow for further research and analysis as to whether or not the visual representation communicates an accurate pedagogy to the context of the photographed or preserved classroom. Or is there a disconnect between the teacher's proclaimed pedagogy and the pedagogy communicated in the visual surroundings of the created context? How can this discourse be further explored? Following a research study such as this, a semiotic analysis could allow for further analysis of visual context. Consider the new knowledge that could be gained by combining a semiotic analysis of the visual elements of a classroom and critical reflection upon pedagogy.

Gained Understanding about Teacher-Student Relationship when Viewing Photographs of American Schools from the First Half of the 20th Century

Furthermore, the knowledge and understanding gained through this study allowed the researcher to view teacher-student relationships in American schools during the first half of the

20th Century through a new lens of posture. The researcher could elude to the relationships within the context of the classroom being teacher-driven wherein the teacher holds the authority in the circumstance for learning. The role of students, visible through the demonstrated postures in the images shared in Chapter 5, demonstrate that the role of the student was to follow the directions, complete a given task, and wait for further teacher direction. Again, due to the nature of the study, conclusions cannot be drawn. The awareness of this learned posture, allows for further observation and investigation of the impact student posture and teacher posture has on the teacher-student relationship. This new visual understanding of posture reflects upon the work of Paulo Freire (1984) and critical theory to view impact of pedagogy and the process of schooling, both historically and current implementation, through a semiotic lens. "There is no historical reality which is not human" (p. 125). The powerful influence of the teacher-student relationship, demonstrates how "Education thus becomes an act of depositing in which students are the depositories and the teacher is the depositor" (p. 57). Freire's concept of "banking" exemplifies the understanding that classrooms and schools are socializing agents. Utilizing this new understanding of the posture of students and teacher presented in the visual culture of the classroom, educators can conduct conscious conversations and observations reflecting upon messages communicated by the exhibited postures within the current educational climate. More importantly, how can we create and discover new and different postures within an authentic learning environment?

A new understanding of visual icons could be representative of the context, pedagogies, and teacher-student relationships of the early 20th Century in American schools. We can now begin to reflect and analyze further practices with the understanding of these iconic visuals.

How do these icons impact current practices of educators, preservice teachers, students, and community members?

Gained Understanding about Visual Research when Viewing Photographs of American Schools from the First Half of the 20th Century

The researcher gained a new perspective of analysis when looking at semiotic signs within images of school. Understanding that our school culture possesses visual signs that communicate perspectives of context, pedagogy, and teacher-student relationships it is essential that this continue to be visually analyzed. Consider, Kenneth Boulding's theory of Eiconic which suggested that when faced with new experiences one of the following four responses occur.

> (1) they will ignore it; (2) if it agrees with the image that we hold, they will accept it, adding it to their world image which readily accepts whatever is compatible with it ("It may change the image in some rather regular and well-defined way that might be described as simple addition."); (3) if it disagrees with the image, they will resist it ("if the resistance are very strong, it may take very strong, or often repeated messages to penetrate them, and when they are penetrated, the effect is a realignment or reorganization of the whole knowledge structure"); and (4) because not all images are uniformly clear and unambiguous, the image may be further clarified or detailed by incoming data (Barry, 1997, pp.99-100).

Using the above context in regards to the findings of this study, the researcher can further question how elements of Eiconics impact the visual culture of our educational classrooms as well as how insiders—teachers and student— and outsiders—community members— respond and react and create new cultures of learning. Meaning, consciously being aware and using the

visual icons (contextual, pedagogical, relational) discovered in this study to view and question the creation of new learning spaces, implementing pedagogy, and developing learning relationships between teachers and students.

Implications of Research Findings

The Role of Semiotics within Educational Research

The research and findings of this study provide another example of the need and impact of semiotics within the environment of education and educational research. We live in a visual culture; and more importantly, we learn and teach in one. Elements of semiotics are evident within the walls of a classroom, in the use of materials, walls, and arrangement of people and furniture within a learning environment. Therefore, how can researchers utilize this visual culture to discover a deeper understanding of the pedagogical approaches embedded within our schooling experiences? How can these visual perspectives and understandings impact our future growth and development in creating a place for learning as well as reform efforts for American schools? What could research, utilizing semiotic analysis, reveal about student learning and teacher practices? How could semiotic analysis of video recordings and/or photographs of current teaching practices allow educators to consciously create visual environments that heighten student learning and increase teacher effectiveness?

Semiotics and Philosophies of Education

As a researcher, it would be important to extend upon this study using the discovered themes and icons to further explore the relationship between historical educational philosophies and the themes and icons presented in the findings of this study. An in-depth analysis reviewing the historical periods presented in the images have been thoroughly examined through textual

analysis, but it is equally important to consider the depth and new understandings that could be discovered and explored through a visual analysis by means of a semiotic methodology. Using the images within the Library of Congress collection and knowledge of the emerging visual context, pedagogy, and teacher-student relationship themes, a new study can explore the clustering of specific codes that communicate or miscommunication the established historical philosophies of education. Thus, consider recent literature suggesting, "any curriculum designed to introduce positive change in the classrooms will fail unless such a proposal is rooted in an understanding of those sociopolitical forces that strongly influence the very texture of day-to-day classroom pedagogical practices" (Giroux & Penna, 1988, p.28).

These studies could explore questions such as what are the semiotic codes/signs in the Library of Congress photographs that communicate: 1.) Traditionalism, 2.) Progressivism, 3.) Essentialism, 4.) Constructivism. What are the specific signs that communicate the philosophy of Dewey? Other questions to further consider should be what is the discourse between historically established educational philosophies and the documented historical images of education within the United States? Additionally, these studies would investigate how methods of semiotic analysis could be utilized to gain further understanding of such discourse. This would allow researchers to further consider, "Institutions like the schools and museum construct systems of meaning that install people in imaginary relations to the real situation in which they live. Identity becomes a fictional text upon which various forces exert influence" (Trend, 1992, p. 11). This is also exhibited in Roland Barthes's idea of cultural signs, as demonstrated in Hans Magnus Enzenberger's understanding that "media actually found ways of satisfying real (but often unconscious) desires" (p. 12).

Future Research through the Lens of Neo-Marxism and Critical Race Theory

The nature and purpose of this research served as a foundation for the researcher to understand a systematic approach to visually analyzing images of schooling, as well as view images through the lens of different perspectives (context, pedagogy, and relationship). Now that this systematic approach to analysis has been established, it is essential that this approach be further implemented through the visual lens of Neo-Marxism based on the understanding of how images impact our understanding and visual culture suggested, "Our eye finds it more comfortable to respond to a given stimulus by reproducing once more an image that it has produced many times before, instead of registering what is different and new in an impression" (as cited in Crary, 1990, p. 97).

Consider the implications of further research exploring photographs through the lens of race and gender, specifically utilizing Critical Race Theory. An example of future research could be a semiotic analysis utilizing the three-layered approach (similar to the one used in this study) in viewing the Library of Congress collection. The researcher could design contextual categories and perspectives for a research study to reflect Derrick Bell and Allan Freeman's frustration with the slow pace of racial reform in the U.S. This study could reflect the hegemony ideology and consider " . . . the continued legitimacy of oppressive structures in American society" (Ladson-Billings, 1998, p. 10). Predetermined categories and perspectives could allow for viewing and coding each image purposefully and consciously considering, "racism is a means by which society allocates privileges and status. Racial hierarchies determine who gets tangible benefits . . . " (Delgado & Stefancic, 2001, p. 17).

Consider how this type of semiotic analysis could further our discussions around the idea "that racism and discrimination are matters of thinking, mental categorization, attitude, and discourse. [And how] Race is a social construction, not a biological reality" (Delgado &

Stefancic, 2001, p. 17). With this awareness, further dialogue could force us to ask deeper, more challenging, questions such as: Is school reform a product of racism? Is the only thing that is holding us back from a powerful education system the racial grip of our history? Who and what will allow us to open our eyes to a system of learning that embraces differences as the unique attributes that will allow our learning experiences to be empowered? Or is it the fear of empowerment that feeds racism? Further exploration using a semiotic methodology through the lens of critical race theory is important as it will allow further avenues to understanding acts of oppression and provide further understanding in efforts to change the cycle of oppression. With this comes an awareness and understanding that schooling is a political act.

Reflecting Upon Educational Publications and Current Practices

American schools have transitioned from using photographic images solely as educational documentation to specifically and purposefully using photographs, images, and icons as communication tools within the educational process as well as for reform and policy. These images of schooling are presented to teachers, students, parents, and members of the public through documents, publications, websites, newsletters, and informational booklets. The impact of these images are twofold. First, the images are selected with a purpose to communicate and persuade. Second, a viewer reads her/his own interpretations of the selected photograph. The selection of images may be based on the author and publisher's interpretation, whereas the reader uses her/his prior experiences, social perspectives, and experiences of being schooled. This possible disconnect could create a potential problem as there becomes a struggle between the perceived notion of schooling and the role of this perception when reflecting on our growth, purpose, and progress of American schools.

Therefore, there is a need for further research to explore the implications of the use of semiotic analysis of the conscious and unconscious interpretations of images used within educational reform publications, informational documentations, and images documenting and communicating our current practices. Consider for a moment educational booklets and documents informing educators and community members of the purpose and pedagogy of current practices within schools in the United States. Below are examples of how a semiotic analysis could provide a systematic and critical lens for future conversation and awareness of the messages communicated in images and text.

The first image (Image 6.1) is taken from a 2006 *Reading First* Publication providing information about approaches to literacy within and outside of a school environment. When viewing the image, a common perspective could be two children sitting individually at separate desks using a pencil and paper to complete a task.

Image 6.1 2006 Reading First Booklet http://lincs.ed.gov/publications/pdf/PRFbooklet.pdf



How does the viewer's interpretations change as the viewer continues to read the text that accompanies this photograph? "Phonemic Awareness Instruction" is a subtitle following Image

6.1 and below this subtitle is the following: “Phonemic awareness is the ability to notice, think about, and work with the individual sounds in spoken words. Before children learn to read print, they need to become aware of how the sounds in words work. They must understand that words are made up of speech sounds, or phonemes” (Armbruster, Lehr, & Osborn, 2006, p. 11). It is important to be aware of the messages being communicated in both the images and the accompanying text. If phonemic awareness is about hearing and understanding the sounds of speech, why is an image communicating a message of isolated and individual pencil paper tasks a means for expanding phonemic awareness? How could further analysis and reflection of this disconnect between isolated writing participation presented in the image and the described verbal participation of a phonemic awareness impact the process of schooling?

Also consider how the image used in the 2006 *Reading First* booklet possesses similarities to the icons and coding explored in this study. (See Image 6.2.) Consider how both images possess the contextual presence of desks and chairs, pencil and paper materials, as well as the pedagogical presence of students sitting in rows, using a pencil and paper to demonstrate knowledge and understanding. How does this conscious viewing allow authors, publishers, and educators to more carefully and consciously select the images they use to communicate about context, pedagogy, and/or teacher-student relationship of our educational climate?

Image 6.2 Photograph from the Library of Congress Data Collection



Additionally, how could further semiotic analysis and reflection provide the opportunity for researchers, educators, administrators, and policy makers to begin having conversations about the images of schooling both then and now? How could these conversations begin to discuss the conscious and unconscious interpretations of the contextual themes, pedagogical themes, and teacher-student relationship themes? How do these interpretations impact how we "do school"? Below (Figure 6.1), provides a side-by-side glance at the images from this study's data collection and images presented in the 2010 online publication *Elementary & Secondary Education: A Blueprint for Reform (The Reauthorization of the Elementary and Secondary Education Act).* What are the implications of analyzing and critically viewing historically archived and preserved images alongside of current images documenting our practices? How could viewing through the lens of context, pedagogy, and teacher-student relationship provide a deeper understanding of our practices and philosophies? What do these images say about our educational system?

Personal reflection, as well as a researcher's analysis, could provide insight to the purposes of our practices and the context of our practices as well as question these purposes and practices.

Figure 6.1 Then and Now Comparison

http://www2.ed.gov/policy/elsec/leg/blueprint/publicationtoc.html



These images allow for questioning and inquiry. What are the similarities and differences among the emotions and feelings of the students attending American schools then? And now? What message do the postures of the students and teachers presented in these photographs communcate to an outsider? Or an educator? What is the role of race in the presentation of schooling?

Consider how the three-layered analysis approach utilized and established within this semiotic study could become an analysis tool for consultants and schools to analyze elements of context, pedagogy, and teacher-student relationship. How would this type of analysis provide a unique lens, in addition to test data, that could impact the school's day-to-day practices? An analysis of images of individual schooling processes can provide opportunities for conversation and awareness of both conscious and subconscious messages. These conversations and analysis could provide a deeper understanding of possible disconnects between the preseved context, pedagogy, and teacher-student relationship presented in the images of their school and the philosophical and implementation of their daily practices. Studies such as these could provide further understanding while addressing the empirical paradigm discussed in recent visual culture literature. Consider, "whether or not we consciously *intend* to flesh out an image, our eyes/mind have been so trained as users/consumers of the visual that they tend to do it "for us"/"to us."" (Clarke, 2005, p. 209).

Conclusion

It is important to consider the application and use of photographs as a rich source of data. Image-based research within education provides a new lens through which to examine, question, and reflect upon our practices and philosophies. "What we find in photographs, however, we find as a result of our willingness to look and our skills in doing so, for photographs are at least as ambiguous as the contexts in which they are examined and viewed. At times they are more so, a characteristic they share with words, gestures, and other systems of representation and symbolization. But not always" (Wagner, 1979, p. 13). For the researcher, this study has been foundation for further conversation, analysis, and viewing opportunities. The researcher's experience through analyzing and coding 1,812 historical images of classrooms in the United

States has prompted further questions, inquiry, and deeper understanding of the impact visual culture has on the context and climate of education.

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Appendix A - Layer 1: Representation of Images & Category Continua (including *Look* Magazine Negative Collection)

Continuum 1 (Time Period)		Continuum 2 (Urban-Rural)	
1900-1909	6%	urban	9%
1910-1919	1%	urban-rural	85%
1920-1929	>1%	rural-urban	3%
1920-1950	3%	rural	3%
1930-1939	1%		
1940-1949	4%		
1950-1959	84%		
Continuum 3 (Wealth-Poverty)		**Continuum 4 (Active-Passive Environment)**	
wealth	2%	active	24%
wealth-poverty	91%	active-passive	28%
poverty-wealth	6%	passive-active	30%
poverty	2%	passive	18%

Appendix B - Layer 1: Representation of Images & Category Continua (excluding *Look* Magazine Negative Collection)

Continuum 1 (Time Period)		Continuum 2 (Urban-Rural)	
1900-1909	35%	urban	46%
1910-1919	7%	urban-rural	29%
1920-1929	1%	rural-urban	16%
1920-1950	18%	rural	9%
1930-1939	4%		
1940-1949	23%		
1950-1959	13%		
Continuum 3 (Wealth-Poverty)		**Continuum 4 (Active-Passive Environment)**	
wealth	10%	active	19%
wealth-poverty	50%	active-passive	21%
poverty-wealth	30%	passive-active	24%
poverty	9%	passive	35%

Appendix C - List of Photographers of the Photographs Presented from Data Collection

Bonn, Philip

Image 5.5

Brooks, Charlotte (1918-)

Figure 4.9, Figure 4.23, Figure 6.1

Image 4.5, Image 5.23, Image 5.24, Image 5.39, Image 5.57, Image 5.64, Image 5.66, Image 5.71, Image 5.72, Image 5.73, Image 5.78, Image 5.81, Image 5.84

Collier, John (1913-1992)

Figure 4.8

Delano, Jack

Figure 4.22

Image 5.8, Image 5.52, Image 5.53, Image 5.67

Gottscho, Samual (1875-1971)

Image 5.33

Gottscho-Schleisner, Inc.

Figure 4.16

Image 4.3, Image 4.4, Image 4.6, Image 5.9, Image 5.10, Image 5.34, Image 5.37, Image 5.44, Image 5.45, Image 5.46, Image 5,63, Image 5.65, Image 5.68, Image 5.69, Image 5.70, Image 5.79

Hine, Lewis Wickes (1874-1940)

Figure 4.5, Figure 4.11, Figure 4.14, Figure 4.18

Image 5.18, Image 5.20, Image 5.28, Image 5.38, Image 5.49, Image 5.61, Image 5.76, Image 5.81, Image 5.83

Horydczak, Theador (1890-1971)

Figure 4.6, Figure 4.13, Figure 4.20

Image 4.2, Image 5.26, Image 5.31, Image 5.36, Image 5.43, Image 5.42, Image 5.51, Image 5.74

Johnston, Frances Benjamin (1864-1952)

Figure 4.3, Figure 4.10, Figure 4.17

Image 3.1, Image 3.2, Image 4.1, Image 5.1, Image 5.2, Image 5.3, Image 5.4, Image 5.6, Image 5.11, Image 5.12, Image 5.13, Image 5, 14, Image 5.15, Image 5.16, Image 5.17, Image 5.22, Image 5.30, Image 5.40, Image 5.47, Image 5.48, Image 5.55, Image 5.58, Image 5.59, Image 5.60, Image 5.75, Image 5.77

Lee, Russell (1903-1986)

Image 4.7, Image 5.29

Liberman, Howard

Image 5.50

Rosskam, Edwin (1903-)

Figure 4.21

United States Army Signal Corps.

Image 5.32

United States Army Quartermaster

Figure 4.4

Image 5.25

Unknown Photographers

Figure 4.12, Figure 4.19

Image 5.27, Image 5.21, Image 5.54, Image 6.2,

Withman, Lieutenant

Image 5.35

Wolcott, Marion Post (1910-1990)

Figure 4.7, Figure 4.15

Image 5.7, Image 5.19, Image 5.56

Appendix D - List of Additional Photographers of the Photographs in the Data Collection

Though used in the data collection and analysis, the photographs of these photographers did not appear in Figures and Images.

Collins, Marjory (1912-1985)

Henle, Fritz (1909-1993)

Hollem, Howard

Palmer, Alfred

Rosener, Ann

Rothstein, Arthur (1915-1985)

United States Office of War Information

Vachon, John (1914-1975)