Visual Sources and the Qualitative Research Dissertation:
Ethics, Evidence and the Politics of Academia--
Moving Innovation in Higher Education from the Center to the Margins

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Abstract

Until recently, qualitative research has made limited use of visual sources, particularly visual texts (drawing, painting or photographs), but also including multimodal data (video and web-based) and visual data (tables, graphs, charts, etc.). Thus, discussions of ethics and evidence in this area have lagged behind those

related to textual data, such as written fieldnotes. This is particularly true for qualitative research dissertations, where graduate students are caught in the tension between established and emerging standards of ethics and evidence. This trend holds true across most institutions of higher education, but it is especially pronounced in those schools that are smaller and more regionally focused where innovations may take more time to become firmly established. This paper examines issues of ethics, evidence, and academic politics in the use of visual sources within the genre of the dissertation, with a special focus on the ways these innovative practices move into the higher education institutions that are at a distance from the center of change. We begin with the viewpoint of a dissertation advisor who has experience in the use of visual sources in the instruction of qualitative research at the doctoral level and its use in the conduct of qualitative research dissertations. Three case examples drawn from three doctoral students in a Graduate School of Education provide a view of the issues involved in researcher generated data, participant generated data, and the ways emerging technologies offer new visualizing possibilities. We conclude with a cross-cutting discussion of issues related to the functions visual sources serve in these dissertations, followed by recommendations for the future use of these materials in the qualitative research dissertation process. Study participants are located in a small, regional institution of higher education, a context that figures importantly in the story. Our goal is to promote discussion and advance understanding of the ways visual sources, and by extension, the ways other innovative research processes can be used by qualitative researchers (particularly doctoral students), despite academia's reluctance in the face of change.

Introduction

The use of visual sources is of increasing interest to qualitative researchers. Doctoral students, seeking to undertake qualitative research dissertations, have not been immune from this trend. We are a group of qualitative researchers (a dissertation advisor and three of her dissertation advisees working in a Graduate School of Education) with strong interest in the use of visual sources. The Fourth International Congress on Qualitative Inquiry (May, 2008) provided us with an opportunity to think about our use of visual sources in qualitative research through the lens of the conference focus on "Ethics, Evidence, and the Politics of Academia". In this paper, we share that thinking with you, extending, and deepening our earlier presentation.

Our example has particular relevance, we believe, because it relates to the introduction of visual sources use in a conventional Graduate School of Education. Unlike some Colleges of Education with faculty encouraged to try experimental paths such as have been engaged in the

most cutting edge examples of arts-based research (Sullivan, 2005) or arts-influenced dissertation presentations (Sinner, Leggo, Irwin, Gouzouzis, & Gruer, 2006), our example comes from a smaller, regional university, of the sort in which many practitioner/researchers receive their doctoral experience. If ideas like the use of visual sources, which challenge the traditional dissertation genre, are to receive broad recognition, there is need for discussion about the issues newness raises in environments such as ours.

The paper is organized in the following manner to accommodate our individual and collective voices. After a quick review of the definitions of our terms, we begin with an introduction to the problems raised by visual sources in general and for the dissertation in particular. Next, you hear the voice of the instructor, Judith Davidson, discussing visual sources in light of the three lens—ethics, evidence, and the politics of academia. She conveys the viewpoint of an instructor and dissertation advisor who is passionate about the use of visual sources. This is followed by three separate student cases, each told in their own voice and taking a perspective on visual sources unique to the challenges and issues raised by their individual study: James Dottin, who conducted a study of adult learners in an urban ministerial program, speaks to participant-generated visual texts and the ways it gives voice to the hidden experiences of the learner's consciousness (Dottin, 2007). Drawing upon her study of middle school teachers and their participation in an historical museum's professional development program, Stacy Penna discusses the dual roles of researcher- and participant-generated visual texts (Penna, 2007). Stuart Robertson discusses the role of researcher generated visual texts (still photographs) and the use of visual models (a form of visual data) in his dissertation study of the forces that shape the founding and stabilization period of charter schools (Robertson, 2008). The concluding discussion is in our collective voice, as we think across the functions of visual sources, its overall relationship to the three concerns of ethics, evidence, and academic politics, and the recommendations we would make to the academic world based upon our experiences with the use of this kind of material within the dissertation process. Our recommendations are grounded in the context from which we work, a smaller regional institution that is grappling with emerging trends in research methodology and how these tools can be appropriately adapted to our situation.

Definition of Terms

In trying to describe our use of and insights into the use of the visual in the qualitative research dissertation, we very quickly came up against the issue of what to call the various things with which we were working. For the purposes of this piece, we will be using these terms in the manner described below:

> Visual Sources: A broad general term for all of the sorts of visual information that might be included in a research project.

Visual Text: Visual items such as photos, drawings, and paintings that are single or 'stand alone' in nature.

Multimodal Text: Video or web page materials.

Visual Data: This term refers to tables, charts, graphs, or other visual materials that provide interpretation of data from a study.

Visualization Tools: These are the actual tools that allow one to create visual data. For instance, Inspiration, a software tool that allows an author to create a web of connections is a visualization tool. The actual web of connections is an example of visual data.

Textual Data: Data that comes in the form of written material. Visual sources may include writing within them. They are considered textual data if written text is the primary formatting of the document. Thus, written or typed fieldnotes are considered textual data, but a table with columns of words based on analysis of those fieldnotes are considered visual data because of the format in which they are presented.

We hope that our considerations will spark further discussion of the meanings of these terms and their functions in qualitative research methodology.

Background Discussion

Visual Sources in Qualitative Research

The last decade has seen a flourishing of interest in the use of visual sources in qualitative research (see for example: Chaplin, 1994; Emmison & Smith, 2000; Pink, 2001; Prosser, 1998). Long enamored of alphabetic texts, qualitative researchers have recently begun to consider the value and possibilities of visual texts of many kinds—from drawings and still photographs to multimodal data such as video and artifacts such as web pages.

Viewed in historical context, the emergence of this interest in visual sources can actually be seen as a resurgence within the field. Those who have gone before have created a foundation from which this new work is based (see for example: Collier & Collier, 1986; Riis, 1971; Visual Anthropology Review Special Issue, 2001).

While the new interest in visual data may be related to many things, including the increasingly visual perspectives television and computer media bring to our world, it is also possible that

academic interest in visual sources has been heightened thanks to new technologies that make it easier to organize and analyze this data. Qualitative Data Analysis Software (QDAS) is steadily increasing its capacity for the organization and interpretation of visual data (Robertson, 2007).

The Genre of The Dissertation

The re-emergence of visual sources as a force within qualitative research, however, presents a dilemma for academic departments. Emerging researchers (doctoral students), who are most likely to be on the cutting edge of new developments and most likely to participate in the development of new methodological tools, must represent their first research attempts within the accepted parameters of the dissertation. Like any genre, the academic dissertation is an elastic AND a conserving container for one's ideas (Davidson, 2000). Centripetal or unifying forces are matched with centrifugal or diffusive forces in the struggle to shape these language containers and their contents (Bakhtin, 1981). In the case of the dissertation, the insertion of visual sources into the discussion has created tension between the traditional form and the emerging innovation. The dissertation and its related discursive spaces—the proposal hearing, meetings with dissertation committee members, and dissertation defense—are the landscape in which this battle is fought.

These struggles around visual sources then become a site that illuminates the issues of ethics, evidence, and the politics of academia in vivid and sometimes startling ways. For doctoral students and their advisors who would venture into the use of visual sources, these three areas deserve special attention if the use of visual data is going to be a successful component of the dissertation—for learner, teacher, institution, and discipline.

Context: A Critical Feature

As mentioned earlier, context is a critical feature of our experience. The work described in this piece took place at a smaller regional institution of higher education—The Graduate School of Education at the University of Massachusetts-Lowell. A Tier Three school, as ranked by the US News and World Report, we are one of the five campuses of the University of Massachusetts system (UMass Lowell, 2008). Located in the northeast corner of the Commonwealth of Massachusetts, we are the product of a merger between an earlier technical school founded to promote the textile industry and a school for teacher preparation. The majority of our students are first generation college goers. As of October 2007, there were 142 doctoral students enrolled in the Graduate School of Education Ed.D. programs (Graduate School of Education, 2008). These students are served by a faculty of four full professors, two associate professors, and eight assistant professors. Like many institutions of our rank and

size, the faculty struggles to stay on the cutting edge in their individual fields, and as methodologists to share information about emerging innovations with students. The use of visual sources within qualitative research is one such emerging area.

Switching Voices: The Instructor – Judith Davidson
Visual Sources and The Genre of The Dissertation--'Points of Notification' and Their Implications

Long intrigued by the notion of genre and the conserving and elastic qualities of genre containers, I have applied this lens to my understanding of the ways the introduction of visual sources to qualitative research dissertations has stretched and challenged perceptions of the dissertation for students, faculty members, and administrators in my program. The heart of my discussion centers around the 'points of notification' I encountered as a doctoral advisor in regard to the use of visual sources and the issues of ethics, evidence, and academic politics in the development of the dissertation. 'Points of notification', I contend, are the starting places for changes in academic practices, and, ultimately in the reshaping of the critical product of academic life—the dissertation. In my institution, the use of visual sources in doctoral dissertations has had a significant and, I believe, positive impact on the genre of the dissertation. The struggles we have encountered in making these changes hold lessons, not only for those who wish to incorporate visual sources in the dissertation, but for the wider arena of concerns that those undertaking the qualitative research dissertation encounter.

My Forays into Visual Sources

In my own research, I have used visual sources in many ways. As a doctoral student I took still photographs for use in my research. As a director of a research project in my early post-doctoral years, I took still photographs and also collected still photographs and drawing data generated by my research participants (Davidson, 2004). I have also used visual sources in multiple ways as a teacher of master and doctoral level qualitative research courses and graduate courses in educational leadership (Kuhn & Davidson, 2007), and I have overseen numerous dissertations that made use of visual sources (Appendix A). My use of visual sources has been a slowly deepening process over the years. I, myself, am a notoriously poor photographer and have no training in drawing, but, nonetheless, I have found this kind of material to be deeply important in the course of my studies and the studies of my students. Again and again, I have heard them say—I didn't think the visual material was going to tell me much, but boy was I wrong. I never would have learned what I did without it!

So imagine my surprise to find that many of my academic colleagues did not have the same immediate 'jump-on-the-bandwagon' response that I considered to be the natural reaction to this innovation. As with many things where we meet resistance, however, their questions and

doubts have moved me to much better understanding of what I/we have been doing with visual sources and have assisted me to break down my assumptions and look at the issues surrounding visual sources with more depth.

In retrospect, it probably should not have been so surprising that the visual approaches we experimented with were a bit shocking, after all, dissertations at our institution did not sport a single colored font at that time, much less an inserted photo or drawing. We were black and white text through and through. In the early years when my students were first getting started with visual sources, they would often use visual sources extensively in the conduct of the dissertation but fail to include a single visual example in the final text of the dissertation, fearful that it wasn't acceptable. I would have to beg them to add a photo or drawing and a discussion of this form of material.

Points of Notification

Visual sources raise special questions in regard to these three pivotal areas: ethics, evidence, and academic politics. In discussing these issues, I draw deeply on my personal experience and those of my doctoral students, focusing on the ways by which I became aware of the concerns or tensions. I refer to this moment of awareness as a 'point of notification'. Points of notification drew my attention to the concern, putting me 'on notification' that this would be a significant issue. Once an issue has entered this realm, I find myself attending to it with a new awareness, seeking out connections to it, and looking for strategies with which to address it.

Ethics

One of the first challenges I encountered as a novice dissertation advisor working with visual sources and dissertations appeared from our Institutional Review Board (IRB) as they encountered my students' proposals to use still photographs (researcher and participant taken) and participant generated drawings or collages. Ironically, this was the first time our IRB had been asked to consider these forms of materials. Regardless of their beliefs as to whether or not these were legitimate ways to investigate social contexts, they focused their concerns on the questions of: "Was it ethical?" "Was it safe for participant and researcher?" "What were the potential dangers?" "How could they be skirted?"

Our IRB, like most IRBs, had developed ethical protection systems grounded in a pre-digital age. These systems privileged the written text over audio and visual materials, which were considered suspect or more dangerous in regard to potential ethical breaches. Destruction of data centered on audio and visual materials, as opposed to written materials.

In truth, my students and I were probably more active in ferreting out ethical breach possibilities than the IRB members, and through our joint work thinking through these issues we helped to develop the mechanisms by which the IRB now accepts these proposals.

The questions I received from the IRB about the use of visual sources served as critical 'points of notification' in regard to visual sources and ethics. From this point on, my thinking was engaged on this topic in new and richer ways.

Evidence

A pivotal moment for me in regard to the use of visual sources and dissertations occurred in a dissertation proposal hearing in which a student was, for the first time in my experience, making visual texts (participant-generated photos), a central data source in her study. To my surprise, the other two members of the committee, in the proposal hearing not in an earlier conversation with me or the student, raised fundamental concerns about the validity of participant-generated visual texts as potential evidence for the findings of a study. They asked hard questions about the acceptance of these methods within methodological literature. They wanted proof that there was an understanding in the field about the use of these forms of data and the ways it could be analyzed and relied upon.

I was dumbstruck that they were not believers. I worried at that moment that the student would be failed and, by extension, that I would be failed as a dissertation advisor. It took me some time to realize that the questions were legitimate and that I owed it to my students to do a better job preparing them in the methodological literature regarding visual sources and working them harder in issues related to analysis and interpretation techniques for visual sources.

This proposal hearing was a critical 'point of notification' in regard to visual sources and evidence. As a result of being put 'on notification', I significantly changed my teaching practices to include more in-depth attention to visual data theories and the collection of visual materials. It also changed my advisement processes, as from that time I have paid careful attention to students' descriptions and justifications regarding visual source collection and analysis.

Academic politics

The ways visual sources can be a focus of tension in regard to academic politics is not as straightforward of an issue as the ways visual sources can raise tensions for ethics and concerns about evidence. In this regard, I cannot point to any one incident, but rather I would have to talk about whispering and nudges in the background of daily academic life. The

peculiar hierarchical structures of academic environments seem to lend themselves to a special kind of jockeying around status, discipline, and method, and I am as guilty of this as anyone. Visual sources, as a so-called new methodological approach, can be considered by some to be lower in status than other forms of research. Visual sources approaches coupled with qualitative research, which also holds low status in many institutions, can be considered of even lower status. In this sense, issues regarding visual sources become interwoven with the arguments about the value of quantitative versus qualitative research.

The Instructor: Conclusions

'Points of notification' are powerful examples of what happens when new tools and initiatives first try to permeate the seemingly smooth skin of an organization's accepted practices—including its central genres of communication. 'Points of notification' are indicators that change is underway.

The three cases that follow my discussion offer three unique ways of looking at the genre of the dissertation and the means by which it was shaped or reshaped by the inclusion of visual sources. Through the use of visual data, these three researchers have themselves added to the notion of the genre of the dissertation. Their examples are testament to the means by which genre can stretch (its elastic capacities) and conserve (its firming or rigidifying capacities). It is someplace between these two that tradition is always in the process of being formed. In the course of employing visual sources in the ways they illustrate here—researcher generated visual texts; participant generated visual texts; visual data and visualization tools as a means of organization and interpretation in qualitative research—these three students encountered concerns about ethics, evidence, and academic politics that speak to the struggle that occurs as practices move from the center to the margins in higher education.

Switching Voices: Case 1 - James Dottin
Participant-Generated Visual Texts: Giving Voice to The Hidden Experiences of The Learner's Inner Consciousness

Guided by the notion that transformational learning theories could enhance our understanding of adult learning, my qualitative dissertation of a graduate seminary program embraces both traditional and emerging methods of data collection and analysis. To elicit an in-depth response to the hidden experiences and multiple realities of the learner's inner consciousness, I utilized the approach of participant-generated visual images of photographs and drawings as prompts during the interview process. In this paper, I share my experiences with this approach of empowering the participant's voice in the research process. In our discussion, I bring attention to the tensions this methodology imposes in terms of establishing boundaries of ethical practice, validating visual texts as evidence, and demonstrating to academic

gatekeepers the systematic rigors used in the collection and analysis process. I conclude with the implications participant-generated visual texts poses in advancing qualitative inquiry and the elasticity of the dissertation genre.

The Focus of The Dissertation

The research question guiding my dissertation was: What is the nature of adult learning in an educational program that emphasizes practices compatible with transformational and pragmatic learning principles? And, what are the implications of such experiences for understanding the adult learning process and informing instructional practice in higher education? I utilized a multiple case study approach to examine four adult learners purposefully selected from a Masters of Divinity and Arts program within the United States (Crewell, 1998; Denzin & Lincoln, 1994; Glesne, 1999; Guba & Lincoln, 1994; Stake, 2005; Yin, 1994). The study's methodological design embraced traditional data sources of interviews, observations, student products, and artifacts, as well as less traditional data sources of photographs and drawings. Traditional and non-traditional data sources were organized, managed, coded and analyzed through the use of NVivo 7, a Qualitative Data Analysis Software tool (Maxwell, 1996; Richards, 2004).

The Power of Participant-Generated Visual Texts

I was drawn to use visual materials through my exposure to visual scholars such as Collier and Collier (1986), Prosser and Schwartz (1998), and Daniels (2006) as well as various visual source assignments in doctoral classes. I adopted the participant-generated approach versus other visual approaches because of the notion that participants could reveal the unknown within the known, that is, through the power of images created by the participants they might be able to help me to understand the hidden consciousness of their experiences (Prosser & Schwartz, 1998). Visual images have the capability of bypassing cognitive defenses of our experiences to tap directly into our emotional and spiritual/intuitive zones of consciousness (Emmison & Smith, 2000; Wetton & McWhirter, 1998). Thus putting these tools in the hands of the participants, through asking them to generate their own visual texts, provided them with a unique opportunity to express the abstract without relying on words as the dominant form of communication (Schratz & Steiner-Loffler, 1998).

The participant-generated approach to visual texts relies principally on the *emic* or participant's viewpoint in the selection and interpretation of their visual images. This interpretive approach seeks to examine the embedded, multi-layered meanings adult participants attached to their experiences that are later mediated through the researcher's perceptions (Merriam, 1998). The process of making meaning transforms the physical images into visual quotes that complement the descriptive language of the study (Creswell, 1998).

Like other forms of qualitative data, photographs and drawings are subjective documentation of the social and material world of the participant. Therefore, the participant-generated approach provides those in the study with the opportunity to have an active voice in the research narrative.

My use of visual texts provided participants in my study with: 1) autonomy to select the images to be photographed or drawn within the visual guidelines and prompts of the research study; 2) an active voice in the research narrative based on the process of eliciting their interpretations; 3) opportunity to undergo a reflective process provoking a journey within their inner consciousness that probes the hidden experiences of the past; and 4) the chance to act as co-researchers in contributing to the study's findings.

Ethical Issues Raised by Participant-Generated Visual Texts

To guide participants in making selections of scenes for their photographs and drawings, I provided each participant with the "Photograph Instructions" outlining the parameters for creating visual texts and avoiding identifiable images of people, institutions or locations (Appendix B). Also, I gave them "Photo Logs" consisting of date, time, description and notes of their photographs (Appendix C). "Drawing Description & Prompts" instructions were given to guide participants' thinking and avoid identifiable images (Appendix D). These guidelines did not restrict participants from self-selecting images that represented their reality of the adult learning process, but the guidelines did teach them how to use this visual approach ethically.

Participant-generated photographs and drawings brought to the forefront ethical issues surrounding who determines the selection of the study's visual images, and the empowerment of the case study participant's active engagement in the research process with the researcher. By entrusting the visual research responsibilities to the participants, I established a mutual level of trust and openness that resulted in the participants taking a vested interest in the research study. As co-researchers, participants were both the creator of visual images and the object of the analysis of those images.

As an example of the participant's ethical use of this visual approach, Antoinette was given the authority by the researcher to self-select visual images that represented what was transformational in her experience of the program in which she was enrolled. Independently, she chose the scene in Figure 1 of the *Sofa and Tea* to represent her reality of the adult learning process. In Antoinette's view, the surroundings of her mentor's office embodied a learning environment that exhibited mutual sharing, openness and transparency. The images of the comfortable sofa, two cups of tea with sugar, sofa pillows, and a box of tissues exemplify a safe and welcoming atmosphere for mutual sharing to take place and possibly

releasing of inner struggles (Dottin, 2007). In the releasing of her emotions that was possible in this caring environment, Antoinette began to face the painful experiences of the past she once avoided. Painful moments were often the result of reflecting on past experiences of marital abandonment, single parenthood, homelessness, and the fear of failure to obtain her professional goals.
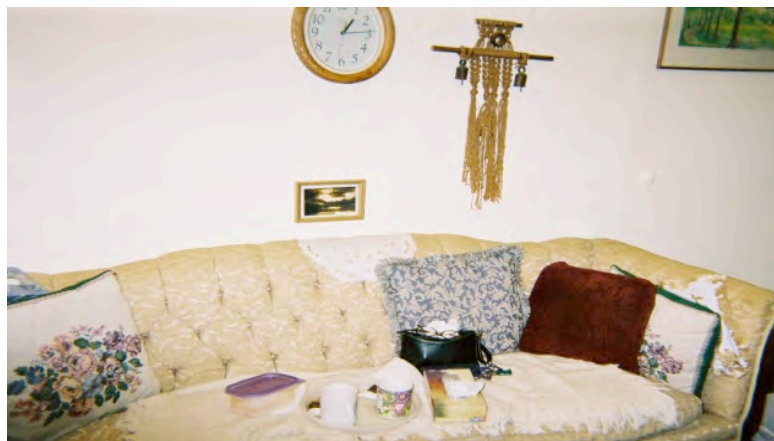

Figure 1. *Sofa and Tea*

The researcher provided Antoinette with the ethical guidelines to take an active part in the creation of the visual text for the study. Antoinette was given the freedom to make independent choices of the visual image for inclusion in the study. She avoided identifiable images of people or signs that would violate the ethical guidelines of privacy and anonymity. The process of creating participant-generated visual data provided Antoinette with a sense of safety to intimately explore the hidden and painful experiences of her past from a secure vantage point. The process furthered Antoinette's ability to take greater responsibility in the visual decision process of the research study because she framed the images to be photographed and evaluated, void of the researcher's point of view. Antoinette was given authority to freely explore her hidden experiences in order to gain a deeper understanding of their meaning.

Participant-Generated Visual Text as Evidence

Two in-depth open-ended interviews were held with each of the four case participants in the study. Participant-generated visual texts were used as prompts in the second interview session in order to elicit interpretations of the participant's inner experiences. Collier and Collier (1986) believe that participant-generated visual text challenges participants to examine their experiences in deeper ways than verbal feedback because the literal character of the images intercepts with the very memory of the learners' experiences. Study participants provided detailed descriptions of their experiences in the second interview session because the visual images brought them back to a familiar place in time. Their photographs and drawings served

as visual quotes of participants' experiences once interpreted and later analyzed by the researcher as potential evidence.

As an example, Sterling explained that his drawing in Figure 2, *The Pathway,* symbolizes that the stepping stones provided him with the direction and process needed to understand his past experiences in order to fulfill his future life goals (Dottin, 2007).
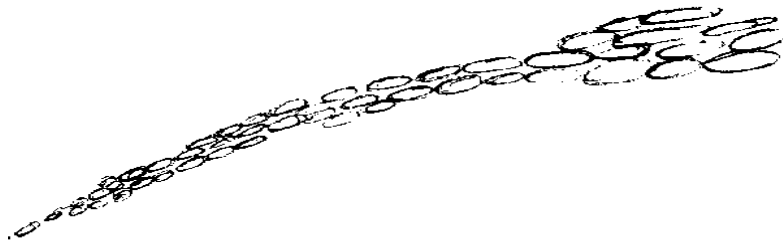

Figure 2. *The Pathway*

In the initial interview session, Sterling was unable or unwilling to articulate hidden experiences of his inner consciousness. In the second interview session, however, his self-selected visual images assisted him in articulating veiled experiences. Visual images provide clues to decode the multiple layers of meaning within the learner's private world (Daniels, 2006). Each stone along *The Pathway* acted as visual prompts that provoked Sterling to decode the meaning of his emotional experiences.

The visual process of decoding multiple layers of meaning was further illustrated in Sterling's Figure 3 photograph titled *Tranquility*. Solitude played a significant role in providing Sterling with a private passageway into the spiritual/intuitive dimension of his experiences. The visual images of *Tranquility* tapped into the affective realm of his inner sanctuary of consciousness. Sterling articulated that the photograph revealed images of seclusion that allowed his experiences and the emotions of his soul to be reflected in the depth of the still water (Dottin, 2007). His reflections brought to the surface a number of submerged spiritual issues of Sterling's past. *Tranquility,* as Sterling's visual quote, provided a clear and audible voice that crystallized the reality of his experiences as evidence that contributed to framing the findings of the dissertation research narrative.

Figure 3. *Tranquility*

Visual Sources and Academic Politics

Within academic circles, there appears to be a natural tension, or at least an ongoing debate, over the adoption of qualitative research methodology versus the long-established quantitative methodology within doctoral dissertations. I began to realize the depth of this tension between these two paradigms when the majority of my graduate professors would lean overwhelmingly towards valuing quantitative research findings versus those of qualitative research. Knowing of the tension between quantitative and qualitative approaches, why was I so naïve to think that academia would be welcoming to emergent qualitative research approaches such as visual sources within the dissertation genre?

My political awareness regarding the use of visual sources in academia was put on alert when I witnessed a doctoral student's dissertation defense hearing in which participant-generated visual texts served as important evidence supporting her study. The prior evening, she presented the findings of her study to the seminar group of doctoral students working on qualitative research dissertations. Her presentation utilizing visual texts was well received by this group. The next day at the dissertation hearing however, the same student was intensely questioned by two members of her dissertation committee regarding the validity of her visual texts; and the theoretical foundation on which she based her claims.

Many doctoral students may feel that the dissertation journey is difficult enough without the additional burden of academic skepticism for embracing visual source approaches. However, an increasing number of doctoral students are recognizing the value and power of visual sources to inform their work. In the face of academic indifference, these students are forging a new path for others to follow and build upon. I accepted such a challenge because I believed

that academic institutions are places where new frontiers are discovered, explored and experienced despite the prevailing political winds of the status quo. Academic tensions challenged me to defend my beliefs of empowering participants in the research process through arguments, claims and rigorous analysis to provide new insights to be added to the knowledge base.

Interestingly for me, this disturbing experience caused me to recognize the importance of an in-depth and proficient use of Qualitative Data Analysis Software tools to demonstrate to academic gatekeepers that visual texts were consistently coded, systematically searched, and analyzed via matrices and models in deriving one's evidence for triangulation with other data sources. Without these software tools, I thought I would have had a difficult time persuading the gatekeepers of the validity of my findings particularly those derived from visual texts.

Switching Voices: Case 2 - Stacy Penna
Visual Texts and The Qualitative Dissertation: Evidence Gathered Through Photos by Middle School Social Studies Teachers and The Researcher

As a doctoral candidate at the University of Massachusetts Lowell, I incorporated visual sources as one type of data for my dissertation. By including visual sources as part of my dissertation, I experienced how powerful its presence could be in a qualitative dissertation. I had the advantage of working with other doctoral students in a seminar that met five times during a semester. The seminar allowed me to learn from other doctoral students that were ahead of me in the dissertation process. When the doctoral students shared their findings with the seminar group, it was clear that the use of visual sources strengthened their final results.

For my dissertation (Penna, 2007), a qualitative collective and instrumental case study design was used to examine the effect of a historical site's educational resources on the practices of four urban eighth grade social studies teachers. In this study, four eighth grade urban social studies teacher participants were the cases, John, Karen, Sue and Amy. The historical site is located in the same school district and town called Mylen, where the teachers work.

Along with pre-field trip and post-field trip interviews, field trip observations, field trip participant logs. I used the visual data in two ways. First, I took pictures during the field trips to capture the field trip experience of the teachers and students at the historical site. The second type of visual material I gathered was participant based, where the social studies teachers took pictures that depicted how the historical site's resources (workshops, institutes, exhibits, primary sources, and field trip) related to their practices as a social studies educator. Prosser and Schwartz (1998) explain that photographs "can show characteristic attributes of people, objects, and events that often elude even the most skilled wordsmith and a degree of

tangible detail, a sense of being there and a way of knowing that may not readily translate into other symbolic modes of communication" (p. 116).

Use of Visual Sources
Researcher Generated Visual Texts

As a researcher, I generated two forms of visual texts to assist me with my research. The first form of visual texts consisted of photographs taken of objects and spaces on the historical site's field trips, a form of "unobtrusive or non-reactive measures" (Emmison & Smith, 2000, p. 43), where photographs are not taken of people, but objects and places. A total of 48 photos were taken, 12 photos for each of the 4 field trips I observed. These pictures were taken only of objects and rooms at the historical site; they did not include people because of privacy issues. I received permission from the historical site to take pictures. During the observed field trips, I took pictures to document the activities and objects that were used. Also, I took pictures of objects that the social studies teachers wrote on their participant logs or discussed in their interviews about the field trip. These photos primarily helped me reference the activities that took place during the field trip and the objects at the historical site which had meaning to the social studies teachers. They were not used in my dissertation because of privacy and confidentiality issues; it would be easy based on the photos to discern the historical site used in the study. These photos also helped me build rapport with the teachers, by volunteering to develop copies of the photos on paper and on a CD for the teachers to use in their classrooms.

The second type of visual source that I created was visual data, which included tables that showed evidence of the social studies teachers using the historical site's resources in their classrooms. By creating these tables it was very apparent that the historical site was having an effect on the teaching practices of my participants. The evidence from Table 1 shows the types of center resources the teachers used in their classrooms. The information contained in the table comes from the following collected data: interviews, teacher artifacts, and photos taken by the teachers. Thus, visual data (still photographs of classrooms) led to visualization (cataloging of visual tools used by teachers in classrooms).

Table 1.
Center Resources Used by the Participants in their Classrooms

Resources	John	Karen	Sue	Amy
Visuals	16	9	16	14
Objects	4	3	5	5
Photos	3	4	8	5
Videos	1	1	1	2
Overheads	3	0	0	0
Maps	3	1	1	1
Timelines	1	0	1	0
Posters	1	0	0	1
Text	5	4	8	2
Non fiction	3	0	6	1
Historical Fiction	1	2	1	0
Primary Sources	1	1	1	1
Website	1	1	0	1
Activity Lessons	3	7	1	2

Participant Generated Visual Texts

The visual texts generated from participants were the 52 photographs taken by the social studies teachers, which Emmison & Smith (2000) describe as "native image-making" (p. 28). During the first interview, I gave the social studies teachers a disposable camera and instructions (Appendix E) on taking pictures of classroom spaces that are used for social studies, plus artifacts and documents that are used in preparation for evaluation of the field trip. The instructions for taking the photographs asked the teachers to take pictures that depict how the historical site's resources (workshops, institutes, exhibits, primary sources, and field trip) relate to their practices as a social studies educator. Table 2 shows the type of pictures the teachers took based on the instructional prompt. The teachers were asked not to take pictures of students and they complied. Along with taking the photographs, the social studies teachers kept a photo log to describe and explain why they choose to take these pictures. The photos and the photo log helped to build evidence about the effect the site's educational resources had on the teachers' practices. Again, visual text is catalogued and becomes visual data in the form of a table.

Table 2.
Visual Data of Participants

Types of Photos	John	Karen	Sue	Amy
Non Fiction Books	5	1	8	1
Historical Fiction Books		1 photo of 2 books		
Center Activities	4	3		
Mylen Pictures	1 photo of 4 Mylen pictures	1 photo of 4 Mylen pictures	2 photos of 8 Mylen pictures	2 photos of 13 Mylen pictures
Historical site objects	2 photos of 5 objects	2 photos of 5 objects	2 photos of 6 objects	2 photos of 5 objects
Videos	1	1 photo of 3 videos		1 photo of 2 videos
Computers	1	1		
Poster	1			
Time line	1		1	
Maps	2		1	
Student Work		3		2

By asking social studies teachers to take photographs, I attempted to "build a bridge" (Prosser & Schwartz, 1998, p. 119) between their teacher reality and my world as a researcher. To further bridge the two realities, I planned to use the photos "as interview stimuli" (Emmison & Smith, 2000, p. 27) to create a more in depth interview by using the photographs as graphic organizers to guide the social studies teachers on their field trip curriculum and instructional practices in the classroom. Instead of using the developed photos as an "interview stimuli", I used the photo log that was present at the second interview to gain more information. This strategy worked to my benefit because three out of the four teachers' photo logs were not very detailed. By asking them about the photos based on their photo logs during the post- field trip interview, the descriptions about the photos were richer.

Evidence from Participant Generated Visual Texts.

The key findings from the visual sources came from the participants' photos. By allowing the social studies teachers to show me through their photos how the historical site's resources impacted their work as a teacher, I received information and evidence that I did not gather from the pre-field trip and post-field trip interviews. The photo log that I asked the teachers to

complete allowed me to further interrogate them about the photos during the post-field trip interview. This was another chance for the teachers to give me their view points about the historical site and its impact on their teaching. By using the Qualitative Data Analysis Software, NVivo, I was able to analyze my photos and keep the photo log within the software.

The photos helped me validate my three key findings that included three areas of practices that showed evidence of being affected by the historical site's educational recourses: classroom instruction, pedagogical content knowledge and collaboration which were included in my findings.

The teachers' photos showed that the historical site's resources impacted their classroom resources, their instructional methods and their student assessments. All four teachers used the resources from the center to create classroom lessons. The center's resources were the focal point of the lesson. All four teachers used photographs sent in a pre-visit packet by the center. All four participants took pictures of these photos for the visual texts the researcher asked the teachers to collect. For example, Karen tells how she uses photos (Photo 5) of the town Mylen to create a lesson in her classroom:

> These great photos that they gave me from the past. They showed what Mylen looked like back in 1886, people who worked digging the canals there are pictures of them, the Irish immigrants. I put these out on the table and in groups they discuss them, they become little historians (Karen, Photo Log, Karen Post-Field Trip Interview).
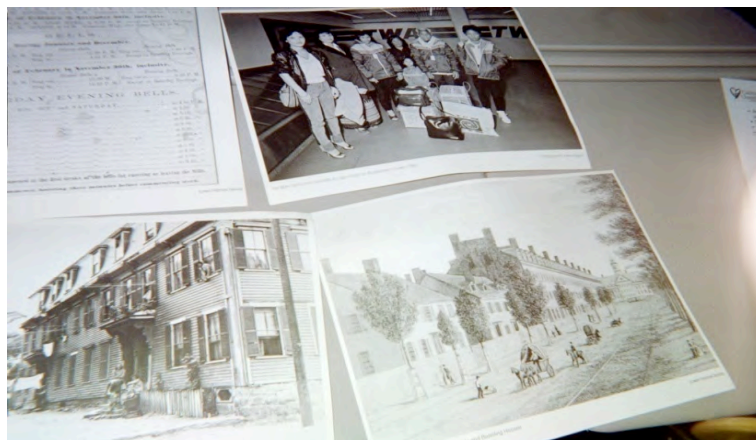

Figure 4. *Karen's Visual Data: Pictures from Pre-Visit Packet*

To prepare students for the field trip, all four teachers used the objects that were given to them at the December in-service workshop facilitated by the center. As visual texts, all four participants took pictures of the following objects from that workshop, a shuttle, a bobbin (Figure 5), a mini- bale of cotton and, woven clothe made from a loom at the museum (Figure 6).

Figure 5. *Amy's Visual Text: Shuttle and Bobbin*

Figure 6. *John's Visual Text: Mini-Bale of Cotton and Cloth*

The teachers described how they used the above objects in their classrooms. Sue states in her photo log "materials may be used to brief students in preparation of mill visit". In Karen's photo log she writes the objects "give a visual sense and touch to discussions in class", and she used the cloth to "compare and contrast 1800's quality cloth to today's cloth. Students learn what types of products were produced in Mylen". While John used these objects in class, he stated his disappointment of not having enough of them for his students to share, "there is

only one spool or one shuttle, and you know a teacher would love to have enough to share" (John, Pre-Field Trip Interview). According to Amy, the objects stimulated students, "the shuttle and bobbin those are props we got from the center, I passed those around. The kids liked that" (Amy, Post-Field Trip Interview).

Interrogating Visual Sources with QDAS

To help me manage and analyze my photos and photo logs, I used NVivo software. For my dissertation, I used NVivo 7, which allowed me to import my pictures and photo logs, but I could only code the text of the photo logs. In this paper, I will refer to NVivo 8, the latest version of NVivo, which allowed me to import my digital pictures and to code on the pictures themselves for more rigorous analysis. I have included some screen shots of how NVivo 8 can be used to manage and code visual data. I translated my dissertation project into this newer version as soon as it was available to allow me to use these newer features. This version of the dissertation project has allowed me to expand and improve the analysis for post-dissertation products.

Using NVivo 8, I first imported the digital pictures into the software and then interrogated the data by creating a detailed photo log that includes my thoughts and the participants' thoughts about why they took the picture. I highlighted specific parts of the picture and wrote comments about that section of the photograph, like in Figure 7.

Figure 7. *Screen Shot 1 - Photo & Photo Log*

I also coded the parts of the picture into a code or node, which allowed me to collect and organize all the different items in the pictures by the theme and/or participant. In Figure 9, I created a node called objects and coded parts of the picture, like the miniature bale of cotton, the cotton ball, and the cloth into the node, plus I was able to code the text from the photo log into the node. The thumbnails of the whole photo above the coded parts of the picture allowed me to see all the pictures in the node at once.
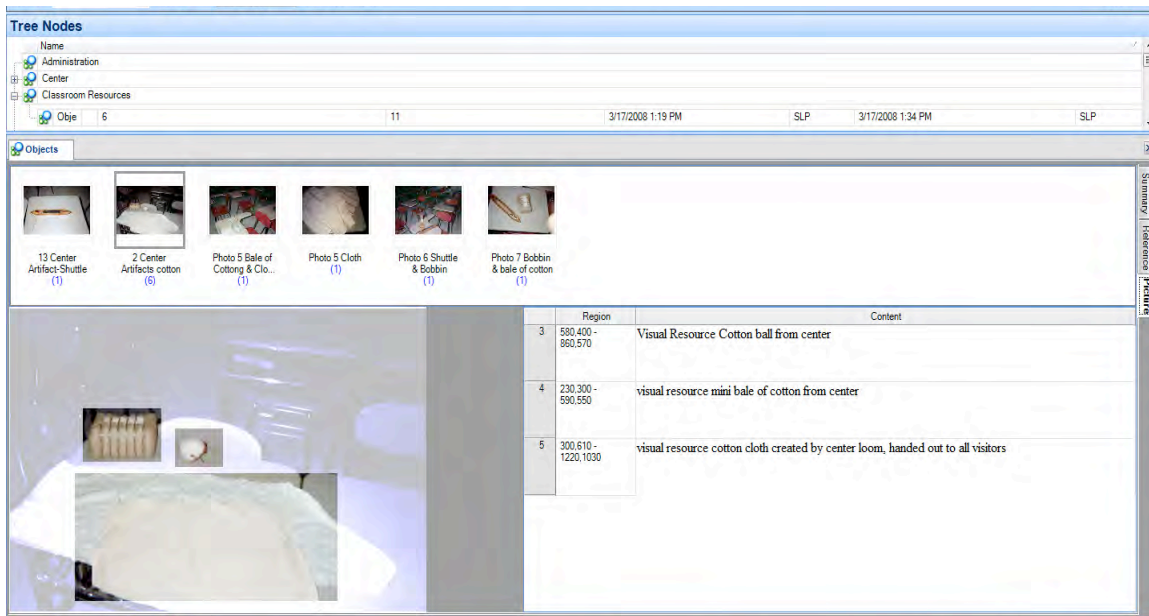

Figure 8. *Screen Shot 2 - Tree Node Objects, Picture View*

When I clicked on the summary tab in the node, I could easily see which pictures I coded and from which sources. This demonstrated to me that all my participants took photos of these objects and by coding the photo log, I found that they used the objects in their lessons (Figure 9).
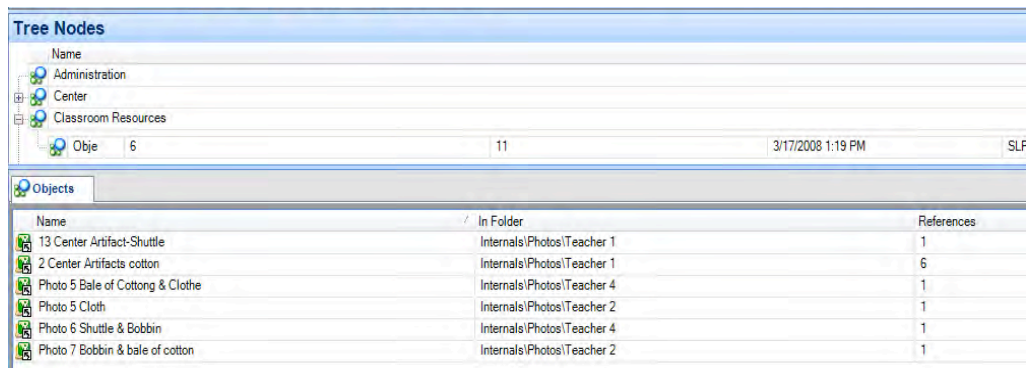

Figure 9. *Screen Shot 3 - Tree Node Objects, Summary View*

Ethics Using Visual Sources

Since I was following many doctoral students who had already submitted research proposals using visual sources to the Instructional Review Board (IRB), I did not have any issues with the IRB understanding how I was going to use the visual data in my study. The ethical issues that I had to address included the settings where the pictures were taken. I had to make sure that I considered the privacy, confidentiality, and anonymity of participants. To protect participants' privacy and confidentiality, I explained how the data would be gathered and shared. Data from observations, interviews and pictures was held in the strictest of confidence.

At the historical site I had to receive permission from the director to take the photos of the field trip activities. I made it clear that I would only be taking pictures of objects and empty rooms. Since the historical site is used to having photos taken by students and teachers, they were not concerned. I made a conscious decision not to include any pictures I took at the historical site in my dissertation. It would be very easy to identify the historical site if the photos were included.

For the social studies teachers taking the pictures in their classrooms, I had to give very clear instructions on what type of photos I was looking for and I explained that if any photos were taken of students or people in the school or if the photos could identify the school, I would have to discard those photos. The teachers did a great job and took pictures of objects only.

Academic Landscape

In the academic setting as a doctoral student, I did not consider using visual sources as unique. This was due to having collected visual texts from the start of my dissertation courses. During one of the first courses I attended as a doctoral student, "Perspectives & Vision", the class was asked to take photos of a setting and to analyze the photos. Once I started working on my proposal and was a member of the dissertation seminar group, I saw other doctoral candidates including visual sources in their proposals and studies. Visual sources seemed like another form of evidence to be used in a qualitative dissertation.

My dissertation committee members were comfortable with visual sources such as photos or drawings as evidence. My dissertation committee included my advisor, Judy Davidson, a historical museum director, and a University of Massachusetts-Lowell faculty member who had been a social studies teacher. My advisor promoted the use of visual sources in our dissertations. The historical museum director used visual sources at his museum to show evidence of historical events. My third committee member as a past social studies teacher also

used visual sources to grab his students' attention about history. The committee was open to visual sources as a legitimate source of data for a dissertation.

Case 2: Conclusions

Using researcher- and participant-generated visual texts strengthened my findings. The tables I created as a researcher to demonstrate the amount of resources from the historical site that the teachers used in their classrooms helped me develop my findings. The photographs that the teachers took in their classrooms allowed them to demonstrate to me the resources they used in their classroom without me physically being there. It also allowed the teachers to really reflect on which resources meant the most to them and how the resources shaped their teaching practices. When defending my dissertation, the photos I showed allowed me to demonstrate my key findings in a way that had more impact than just a verbal explanation.

The use of software in qualitative studies allowed me to dissect their photos in ways that could not be done before. By using a software package, like NVivo 8, I can code the photograph and separate it into sections, allowing the analysis of the visual text to go through a more rigorous process. This process could help visual sources become a more accepted form of data collection as academics can now demonstrate through the software how the visual sources have been analyzed.

Switching Voices: Case 3 – Stuart Robertson
Thinking Visually/Visually Thinking: The Role of Visual Data and Models in a Doctoral Dissertation

A doctoral dissertation is likely to contain charts, tables, and graphs. However, photographs, drawings, and models are not as commonly found. As a doctoral candidate analyzing data and compiling evidence for my emerging research findings, I found that photographs and models provided support for some of my key ideas. Drawing on the techniques used in visual sociology and visual anthropology as support, I included these data forms in my dissertation. The photographs I chose to include became primary data sources, telling a part of the story that words alone could not. Further, models provided a concrete representation of abstract thoughts.

My Background and Orientation to Visual Sources and The Genre of The Dissertation

In qualitative research, acknowledging how your experiences are situated in the landscape of your topic is a well-recognized practice. Originally, I had not considered this in terms of the use of visual sources. Although it was not immediate, I became aware that many of my colleagues in the doctoral program did not readily accept photographs and drawings as a form

of data. This concept, however, was one that I quickly embraced. As I reflected upon this situation, I came to realize that my background contributed greatly to this.

When I entered the doctoral program, I had been an elementary teacher for 18 years with a strong background in child development and its role in the education process. Within this context, children's drawings, along with videos of children and classroom activities, play an integral part in coming to understand the whole child. Thus, coming to accept visual sources as a way of understanding educational contexts was not a difficult leap for me.

The dissertation as a genre exists within an historical context. Although acceptance for variations in format exists, it is frequently presented solely as a written text without graphic elements. One of the classical and more widely recognized formats is the five chapter dissertation. Designed from a quantitative perspective, producing a qualitative dissertation in this format presents its own set of challenges. Increasing the challenge, I chose to include photographs as a primary data source and visual models created as part of the analysis process.

These choices represented a departure from a traditional view of the acceptable structure and format of the dissertation. Once the decision was made to include these pieces, three areas of concern required special attention: evidence, ethics, and the academic landscape. In the following section, I will examine the implications of each of these areas and discuss my approach to them.

Visual Sources as Evidence

According to the American Heritage Dictionary (2008), evidence is "a thing or things helpful in forming a conclusion or judgment." Traditionally in qualitative research, evidence has been gathered from sources such as interview or focus group transcripts, observations, or primary documents. However, I posit that photographs (visual texts) and models (visual data) can also constitute evidence.

Photographs

One of the concepts I explored as part of my research was the idea of teacher-centered versus student-centered classrooms. I used the work of Larry Cuban (1993) as a framework for this discussion. Part of my data collection included photographing the physical arrangement of various classrooms. During this process I decided to photograph each classroom while standing in the doorway. This collection of photos became known as "A View from the Door."

Figure 10. *First/Second Grade Classroom*

Figure 11. *Third/Fourth Grade Classroom*

Figure 12. *Fifth/Sixth Grade Classroom*

One of the points I focused on with these pictures was the degree to which there was evidence of a teacher's area present in the initial view of the room. In the dissertation I noted:

> In the first/second grade classroom, the teacher had set aside a large area for her own use which included a desk and long table. Her area could be easily identified just from standing in the doorway (see Figure 10). In the third/fourth grade classroom the teacher's desk was less obtrusive and located in a back corner of the room (see Figure 11), barely noticeable from the door. Finally, the fifth/sixth grade teacher's desk was the least obtrusive (see Figure 12). Standing in the doorway you could not see it. It was small, and located in the upper-right corner of the room (Robertson, 2007, p. 106).

The premise I was presenting was that the larger the area a teacher set aside for him or herself, the more likely the organization of the room and the instruction that took place in it was to be teacher-centered.

As much as I could describe the set-up I found in each room, the photographs were more powerful in illustrating what I had noticed.

Models

Photographs of the charter school I studied were a primary form of data for my dissertation project. However, the use of visual tools was not confined to these alone. I also made extensive use of visual models as a means of deepening my interpretive possibilities. I have included one of the models I created during the process of data analysis. The original purpose

in creating this model (Figure 13) was to help "me explore the relationships between the nodes that I had created and the sources with which I was working" (Robertson, 2007, p. 65). Upon completion of the model, I realized that it provided further insight into one of the key points I was trying to make. As I noted, "Furthermore it illustrated the complexity of creating the school as well as the idea that influences, seen in red in the center of the model, was a unifying theme across all the data sources" (p. 65). In this way, the model became evidence I could use in support of the idea that the creation of a charter school involved the complex interaction of a number of different sources of influence.
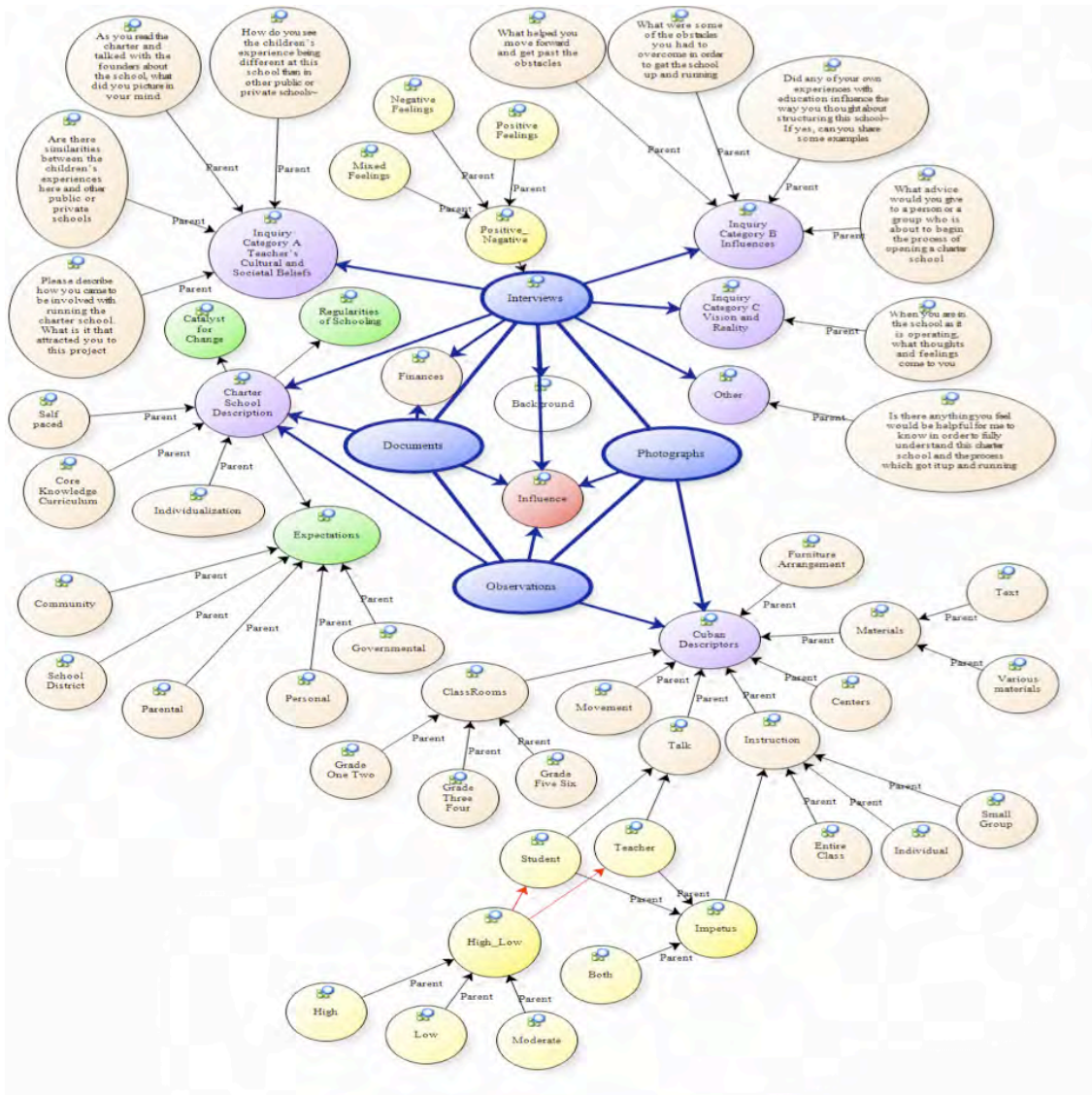

Figure 13. *Qualitative Data Analysis Software Model:*
Illustration of Researcher's Abstract Concepts and Interactions

Ethics

This topic was especially critical when it came to the use of photographs. The first consideration was planning how the pictures were to be taken. My goal was to capture the environment created within the classroom. However, deliberately selecting the subject of each of the photographs can cause subtle or contrary examples to be overlooked or omitted. In order to keep a balance in what was photographed, prior to beginning the research process, I made the decision to have the first set of pictures create a 360º random view of the room. This would be followed by researcher-selected subjects.

The analysis process is another point in which ethical consideration needs to be given. A concern I have heard expressed to fellow candidates using visual sources revolves around the question, "Who are you to say what that [picture or drawing] means?" If the subject is not or cannot have a voice in interpreting the visual texts, this is a valid concern. In an effort to address this possible concern, I reflected upon a variety of ways to approach the analysis process. In the end, I chose a two-part solution; first, I defined what the purpose of the visual texts would be within the study as a whole and second, I predefined indicators of key concepts I would be looking for within the photograph.

In selecting photographs to be included in the dissertation, I had to be acutely aware of the confidentiality issue. Careful scrutiny of each picture had to take place to assure there was nothing that could identify the school or any of the participants. If there were some parts of the photo that could be easily associated with the location, a decision had to be made as to whether they could be altered in such a way as to protect confidentiality without substantially changing the idea being illustrated. One example of this was a picture in which students' storage cubbies were present. Nametags were on the front of each one. I chose to blur the tags to assure that they could not be read and used the picture since this did not alter the picture in such a way as to detract from its ability to illustrate a point.

The Academic Landscape

The dissertation is created and defended within an academic environment. Understanding how the faculty view quantitative and qualitative research allows you to position your work in the strongest possible position. As I prepared my dissertation for review I knew that qualitative research was emerging as a force within the university and others had successfully defended qualitative research dissertations before me. Still, I was aware that I would need to provide support from previously published research that employed methods similar to the ones I had chosen.

Although qualitative research had been increasing in use and acceptance, the inclusion of visual sources was still relatively new. To that end, I was aware that I would need to provide clear support for the use of this form of data. I turned to visual anthropology and visual sociology to do just that. Drawing on the work of Collier and Collier (1986), I equated the pictures that I took to a cultural inventory. I went on to note that Harper (1988) points out, "Visual sociologists know from their own experience that it is no less difficult to take theoretically meaningful photographs than it is to make useful observations or to identify relevant variables. The camera is merely a means through which an informed vision can be made concrete" (p. 60). Works such as these provided a foundation on which I could build support for my use of these forms of data.

Switching Voices: Discussion in A Collective Voice

Speaking in four separate voices, we have ranged across a broad territory in relationship to the qualitative research dissertation and the use of visual sources. Judy attacked the issue from the point of view of an instructor initiating new practices that raised questions about the standard or traditional practice of the educational dissertation. James discussed the power of participant generated data and described how concern about acceptance of visual source led him to pay close attention to the issues of evidence. Stacy followed, presenting the dual perspective of participant generated and researcher generated, as well as making extensive use of various visualization tools in the interpretive process. Stuart completed the dissertation cases with consideration of researcher generated visual texts and researcher generated visual models for use in the development of interpretation. All three cases discussed the ways Qualitative Data Analysis Software (QDAS) was used to improve the quality of analysis and to provide a means of developing acceptance of visual sources with dissertation committee members.

In making use of visual sources in the conduct of the dissertation, the three cases demonstrated the power of visual sources to stand on their own two legs in serving the ends of the qualitative research dissertation. This can be seen in the knowledge-gleaned in the participant-generated data of ministers-in-training presented by James to the ways Stacy was able to use visual texts to understand how a historical museum changed teachers' curricular practices in positive ways. Stuart's photos from the classroom doorway of the charter school at which he conducted his study were powerful ways for student researcher and dissertation committee member to experience the ways classroom organization represented teacher philosophy.

Our lens in looking at both the instructor and the doctoral students' experience with visual sources has been that of – ethics, evidence, and academic politics. The stories of instructor and doctoral students are proof of the complicated intertwining that exist among a methodological innovation such as the use of visual sources and the key methodological

topics and issues that are in play as an innovation is introduced and moves into regular practice in an institution. The discussions that emerge at the intersection between an individual research project and its methodology are not confined to one student and his/her advisor, but they quickly extend into the offices of many other graduate faculty (committee members), the program administration (final acceptance of the dissertation), not to mention other administrative offices such as the Institutional Review Board.

All four voices here speak from the context of a smaller regional public university. While aware of the trends and research regarding the use of visual sources as a methodology at larger university centers that have developed a specialty in this area, we must tread more carefully in such a local setting, serving as instructors to our colleagues (faculty and students) in these new topics. For this reason, as we proceeded in the use of visual sources, we felt strongly the elastic AND conserving nature of the dissertation as a genre.

Our experience with visual materials in the doctoral dissertation has taught us important lessons for its implication in qualitative research dissertations for the range of audiences that participate in the generation and completion of the product, which we share below:

For Students	• Be prepared for a range of reactions
	• Get the training you need to work productively with this form of data
	• Ground yourself in methodological literature for visual sources just as you would for other qualitative research techniques
For Qualitative Research Instructors	• It behooves us to include visual text collection and analysis issues in the core or basic qualitative research instructional components
	• Students should recognize that there is a methodological literature in this area and have knowledge of how to access it

For Dissertation Advisors	• Be prepared to help students negotiate murky or turbulent waters in regard to visual sources and the discourse space of the dissertation. • Be friendly but firm with your colleagues!
For Programs and Institutions	• Provide students and faculty with the technical tools needed to make good use of visual materials. • IRB policies should be reviewed in insure that they take an appropriate approach to visual source uses.
For disciplinary organization and qualitative research organizations	• We need to consider the ways we are supporting the development of fluency with visual sources among academic faculty and doctoral students. • How are we contributing to an understanding of standards for the use of visual sources? • How are we helping to move forward in regard to the use of new technologies and visual sources?

Figure 14: *Collective Recommendations:*

Regarding Implementing the Use of Visual Sources in the Qualitative Research Dissertation

Collective Voice: Conclusions

While challenging at times, our forays into the use of visual sources in the doctoral dissertation have been deeply satisfying. Despite the surprises, we would not want to have missed these experiences. We found it extremely helpful to consider innovation through the triad of lenses—ethics, evidence, and academic politics. For both instructor and graduate student, this structured look at an emerging issue helped us to better understand the institutional context in which we were working and the context in which our experiences are lodged within the wider frame of the methodology—qualitative research. We hope our discussion will open another strand of consideration in this very important methodological advance—the use of visual sources in doctoral dissertations. We also hope that our experiences can aid in the discussion of the use of these tools, not only at the most experimental institutions of higher education, but also at those places that are further from the center of the innovation.

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Since the fall of 1999, *James Dottin* has taught and studied adult learners at Middlesex Community College in Lowell, Massachusetts. As a tenured professor in the Department of Business Administration, he has initiated a number of innovative approaches to meet the varied learning needs of adults that included collaborative small group work and the

curriculum development of the Business Honors Program. James' dissertation, entitled "Transcending Knowledge Barriers: An Integrated Instructional Approach to Transforming Experience of Adult Learners in Higher Education," focuses on the experiences of adult learners as an approach to creating knowledge within ones discipline.

Stacy Penna works as an Business Development Manager for QSR International, the company that develops and markets NVIVO software for qualitative research. She received her Doctorate in Education at the University of Massachusetts, Lowell.

Stuart Robertson is the owner of Robertson Educational Resources, a consulting firm specializing in educational research, instructional and technological training, individualized tutoring, and educationally based informational presentations. He is adjunct faculty at both the University of Massachusetts Lowell and Rivier College. Stuart has presented papers at The Fourth and Fifth International Congress of Qualitative Inquiry, as well as the New England Educational Research Organizations annual meetings. His work has appeared in other peer reviewed and professional journals.

Appendix A

Dissertation Studies chaired by Davidson that made significant use of visual data approaches.

2007	*A qualitative research study of the educational experience of four Asian American students' in a baccalaureate business education program. Frank Andrews*
2007	*Transcending knowledge barriers: An integrated instructional approach to transforming the learning experience of adult learners in higher education. James Dottin*
2007	*A qualitative research study of service learning in three undergraduate business courses. Sharyn Gallagher*
2007	*A study of teacher collaboration in a dependent school-within-school: How do teachers perceive their collaborative process and its effect on instruction. Roxanne Howe*
2007	*What is the role of mentoring in the professional lives of female intercollegiate athletics directors? Joan Lehoullier*

2007	*Beyond planning a field trip: A case study of the effect a historical site's educational resources have on the practices of four urban eighth grade social studies teachers. Stacy Penna*
2007	*Exploring the relationships that exist between cultural beliefs and expectations and charter school founders' beliefs and expectations; and how they are reflected in the structure of the educational setting: A case study of a charter school. Stuart Robertson*
2006	*How occupational therapists, working in a rehabilitation hospital, weave occupation into their intervention methods. Janet Curran Brooks*
2006	*Work activities of professionals who occupy the role of faculty support staff in online education programs. Carolyn Siccama*
2005	*Expertise in Spiritual Care. Julieann Furtado*
2003	*How successful foreign language teachers interpret the changes and challenges in the 21st century K-12 foreign language classroom. Cynthia Bates-Morrissette*
2003	*Nontraditional students in associate degree nursing programs: Understanding student-faculty relationships. Jessica Price*

Appendix B

Photograph Instructions

Guidelines for taking 12 photographs of your depictions of the adult learning process:

1.   With the disposable camera provided, please take 12 photographs of the contexts of the adult learning process in your practicum program.

2.   You are allowed to take multiple pictures of a single space or event.

3.   When taking photographs of a space or event where there are other people, please take the photo before or after the event so as not to take pictures of the activity or its participants.

4.   The Photo Log contains 12 entries numbered 1 – 12. Use this log to take notes for your self on what you took pictures of. They can serve as reminders or a memory aid during the interview session.

5.   For the purpose of **confidentiality**, it is strongly advised **not** to take photos of people. Any photos that could possibly identify you, your institution, field sites, will be returned to you immediately after the interview for safe keeping.

6.   When you are done taking the 12 photographs, you may use the remaining photos for your personal use. Please bring the camera and the Photo Log to the next class session. I will develop all the photos and give them to you as personal photos without cost at the interview session.

Appendix C

Photo Log

Photo #	Date	Time	Photo Description	Notes
1				
2				
3				
4				
5				
6				
7				
8				

Appendix D

Drawing Description & Prompts

Participants will be asked to draw the context of a positive or negative experience, scene, activity or thought that has impacted their learning process while participating in this graduate program. Participants will draw three separate drawings based on the following prompts:

1.   A memorable mentoring experience

2.   A memorable classroom or small group experience

3.   A memorable field site experience

The three drawings will serve as prompts in the second interview.

Appendix E

Instructions for Taking Photographs

Instruction: Take pictures that depict how the historical museum's resources (workshops, institutes, exhibits, primary sources and field trip site visit) relate to your classroom practices.

Guidelines for taking pictures:
- With the disposable camera provided, take twelve pictures

- It is ok to take multiple pictures of a single space or object.

- When taking pictures of a space where there are other individuals, take the photo before or after the event so as not to take pictures of students or colleagues.

- The photo log contains twelve index cards each numbered one through twelve. Please use these cards to take notes for yourself on what you took pictures of. This can serve as a reminder or a memory aid and will be helpful during the second interview.

- For purposes of confidentiality, it is strongly recommended not to take photos of persons not involved in this study. Any photo that could possibly identify you, your school, colleagues that you work with or students will be returned to you immediately after the second interview for safe keeping.

- When you are done taking twelve photographs, please send the camera and photo log back to me in the padded, self-addressed stamped envelope.

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