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The effects of art knowledge, pedagogical experience, and contextual information on art teaching

Kowalchuk, Elizabeth Ann, Ph.D.

The Ohio State University, 1992
THE EFFECTS OF ART KNOWLEDGE, PEDAGOGICAL EXPERIENCE, AND CONTEXTUAL INFORMATION ON ART TEACHING

DISSertation

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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1992

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Advisor
Department of Art Education
To my parents,
Jo and Tole Kowalchuk
ACKNOWLEDGEMENTS

I began my studies at Ohio State without a clear picture of what getting a doctorate entailed. Oh, I had some ideas. I knew it involved something called research. But, I didn't know what research was, and I wasn't sure if I would like doing it. I didn't know that a doctorate was really about investigating ideas and problems, about inquiry. I didn't know it was about becoming a scholar. I owe my understanding of the nature of disciplined inquiry to the professors in the Department of Art Education.

I owe my understanding of what it means to be a scholar to the members of my committee. I express sincere appreciation to my advisor, Judith Koroscik, for encouraging and guiding me through the doctoral process. I thank Michael Parsons and Arthur Efland as well.

My friends and family have lived through this experience with me. I thank my mother for her unfailing patience and encouragement. I thank Sam Short, Mary Leigh Morbey, Lorrie Blair, Jeanie Auseon, Rina Shere, Eugenia Costa-Giomi, Candace Stout, and Bob Dalton for advice,
friendship and moral support. I thank Sue Carey for convincing the teachers in her district to participate in this study and for helping me to keep writing a dissertation in perspective.
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CHAPTER I
STATEMENT OF PROBLEM

When I was an elementary art teacher, I was lucky enough to serve as a peer teacher and team leader to a young beginning art teacher named Pat Anderson. As her peer teacher, I was charged with observing Pat's generic teaching skills and offering recommendations to improve her teaching performance. Although she was a beginning teacher with beginning teacher characteristics, she showed promise that she would eventually become what most would consider to be a good art teacher. Indeed, the faculty and administrators were very happy with her teaching performance and had recommended her reappointment.

Yet, when Pat used works of art in her classes, talk always centered around formal qualities or the subject matter contained in the work. If she talked at all about the artists who made the works of art, she limited herself to factual information: the name of the artist, his/her nationality, or the general style of the work. For Pat, looking at and talking about works of art only supported the studio activity. It gave her a way of directing and
motivating students. Sometimes she used a method of looking at and talking about art she learned in college. After her students described the colors, shapes, and lines in the picture, they would talk about what was in the picture and how the artist made it look that way. They would speculate about why the artist had painted a picture like it, and they would decide if it was a good work of art. Then, Pat would relate the talk about the artwork to her studio project. She believed too much talk about art distracted the students from the art activity, and this belief was reinforced by her students who became disruptive if art talk and lesson motivation lasted more than ten minutes.

I got to know more of Pat's strategies for teaching and learning art as we talked and planned units of instruction after school. During these discussions, I was occasionally amazed that Pat did not know artists I considered to be important, artists like Marcel Duchamp, Jasper Johns, or Diego Rivera. Some of these artists were even represented in our art reproduction collection. While she may have been familiar with the image, who the artist was or why that particular work of art was significant was unknown to Pat. For these reasons, Pat rarely made deep connections between concepts contained in artworks and art making activities. Instead, she
structured her teaching around the elements of design and the objects depicted in artworks.

I began to wonder how Pat's understanding of art influenced the way she taught. Although she would eventually strengthen her generic teaching skills, would her knowledge of art and artists deepen with time as well? Would teaching experience lead her to make connections between the study of art and art making she did not now make? Or, would other factors help Pat see relationships between content areas?

These questions have been shaped, altered, and honed with time and form the basis of a cycle of research I intend to explore beginning with my dissertation. In this study, I examine the effect of art understanding and pedagogical experience on elementary art teaching.

**Studying Teacher Understanding**

The issue of teacher understanding is fundamental to problems now facing the field of education. Several recent publications point to a breakdown in American education that centers on the quality of teaching and the nature of learning. Both *A Nation Prepared: Teachers for the 21st Century* (Carnegie, 1986) and *Tomorrow's Teachers: A Report of the Holmes Group* (Holmes Group, 1986) offer recommendations to remedy this situation that place teachers and teacher education at the core of the solution. The Carnegie report describes teachers as
"people of substantial intellectual accomplishment...whose knowledge is wide-ranging and whose understanding runs deep" (p. 25). The Holmes Group specifies goals to improve the quality of education by reshaping the preparation of teachers. In fact, both publications call for restructuring the way teachers are trained, focusing, among other things, on the depth of content knowledge held by teachers and the way in which they use their subject understanding to make connections between teaching and learning.

Toward Civilization: A Report on Arts Education (NEA, 1988) specifically addresses the importance of quality art teaching and art teachers. In this document, the National Endowment for the Arts states that the goal of arts education should be student understanding of the arts (p. 13). To accomplish this goal "arts education must be taught sequentially by qualified teachers" who are knowledgeable about what they teach (p. 13). Furthermore, the preparation of teachers should include emphasis in history, critical analysis, and the philosophy of the arts as well as "skill acquisition, creation, and practice" (p. 103). It is recommended that attention be paid to relationships within arts disciplines as well. Research in arts education "should focus on matters that can actually improve what is done in the classroom and include "studies of learner knowledge" and "studies of teaching
methodology" (p. 105). All of these recommendations relate the quality of teacher understanding to the depth of student understanding. Without one, the other is unlikely.

Davis (1990) reinforces the vital role of the teacher in art learning and indicates there are three broad issues confronting art teacher educators that need further examination: content knowledge base, professional knowledge base, and conceptions of teacher quality (p. 750). Unfortunately, research in art education has not examined teacher understanding and its effect on practice in a sustained way. Not one of the 62 research articles published in art education journals between 1982 and 1990 focuses on the knowledge required to teach art (Kowalchuk, 1990). Only a few studies focus on art teacher preparation or development. Barrett (1988) interviewed studio art professors to determine if their approach to art criticism varied from the treatment of criticism in art education. He found that studio art criticism exclusively involved the evaluation of student products. In contrast, criticism in art education includes describing, analyzing, and interpreting artworks so that informed understandings can be gained (Feldman, 1973; Getty, 1985; Wilson, 1988) Although exposed to criticism theories in art education courses, studio courses provide undergraduate art education majors with practical
experience in criticism. Barrett suggested that these studio experiences can be influential in the development of teachers' understandings of art criticism.

Parks (1986) examined seven textbooks used in art teacher training programs to determine if art education majors were receiving exposure to attitude formation and change information. Despite frequent reference to the importance of attitudes in art learning, Parks found that none of the texts studied discussed what attitudes were, where they came from, or how they can be affected.

While Barrett (1988) and Parks (1986) imply that content knowledge and pedagogical understanding are significant factors in teachers' approaches to art teaching, they have not explicitly examined the connection between art teacher knowledge and practice. This is problematic because research in knowledge acquisition and transfer indicates learners often have difficulty applying what they know in new situations (Prawat, 1989).

The Problem of Art Teacher Understanding

The relationship between art teacher understandings and practice can be viewed as a complicated problem of knowledge transfer: teachers organize and translate what they know about art and pedagogy to content relevant for art teaching. Commonly accepted methods of art teacher preparation emphasize both art content knowledge and pedagogical training. Educators expect that art teachers
will both understand and make connections between content areas in ways that are pedagogically effective. However, if content knowledge or pedagogical understanding is shallow, fragmented, or incomplete, then the degree to which teachers make connections between art history, criticism, aesthetics, and art making will be limited. This perspective is reinforced by research in psychology and education indicating connections are difficult to achieve in learners unless they are prompted. Even then, transfer often fails (Perkins & Salomon, 1988).

Current research on teaching and learning provides evidence that deeper understandings and transfer can be fostered in learners by centering curriculum around related higher order concepts and principles (Perkins & Salomon, 1988; Prawat, 1989). Can the same be true of art teacher understandings? Do art teachers grasp connections between works of art and levels of meaning more readily when curricular materials are structured and organized around key ideas and conceptually integrated information? How does pedagogical experience interact with content knowledge to influence teaching? These questions frame the problem addressed in my dissertation.

Research Questions and Overview

The relationship between teacher knowledge and practice has been examined by researchers who seek to understand the differences between novice and expert
teachers in subjects as diverse as social studies, science, mathematics, and English (Grossman, 1990; Hashweh, 1987; Leinhardt, 1986). Drawing on previous psychological studies, these investigators have found that beginning and experienced teachers often exhibit characteristics similar to novices and experts in other domains (i.e. Berliner, 1986; Calderhead & Miller, 1986). Employing descriptive methodologies, several of these studies have focused on teachers' content knowledge and use of curricular materials during instruction (i.e. Grossman, 1990; Stein, Baxter, & Leinhardt, 1990; Wilson & Wineburg, 1988). Some researchers have concluded, among other things, that the depth and organization of teachers' content knowledge can influence how they "select material to teach, how they structure their courses, and how they conduct instruction" (Grossman, et al., 1989, p. 28).

Applying the results of this research to the case of Pat Anderson, it seems likely that art knowledge, as well as experience, influences art instruction. Unexplored, however, is exactly how these variables effect art teaching and how expertise is characterized in art teaching.

This research focuses on the effects of content knowledge, contextual information, and teaching experience on art planning and teaching at the elementary level. To investigate this topic, I developed several questions:
1. How does teaching experience effect the planning and presentation of an elementary art lesson that focuses on a specific work of art?

2. How will contextual information effect teachers' understandings of the artist's work and influence their approaches to planning and teaching?

3. How does art knowledge effect the content of art teaching?

A study with three phases was conducted to examine these questions. First, four groups participants with varying levels of teaching experience were asked to plan a lesson that focused on Manet's painting *A Bar at the Folies-Bergere* (Plate I). Before writing the lesson plan, however, the teacher-participants read contextual information about the artist and his work that was organized conceptually in two different ways. Then, a sample of participants from each level of teaching experience taught the lesson he or she planned to a class of upper elementary aged students. After the lesson presentation, the teachers were interviewed to examine how they assessed their lesson. Finally, this same sample of teachers was interviewed in-depth to gain an understanding of the depth and breadth of their art knowledge and approaches to pedagogical tasks.
Plate I. Edouard Manet, *A Bar at the Folies-Bergere*, 1881-2, oil on canvas, 37 1/2" x 51", The Courtauld Collection, London.
The effects of teacher knowledge and experience on teaching has not been investigated in a sustained way in art education. However, research in the areas of cognitive learning and teaching shows applications for the examination of art teacher understanding and practice. This chapter reviews these current conceptions of learning and teaching.

Current Conceptions of Learning

In the 1960's some psychologists shifted their research concentration from behavioral to cognitive conceptions of learning that emphasized human mental functioning and thinking processes. Researchers in cognitive science see learning as complex "concrete phenomena that can be studied scientifically" (Resnick, 1985, p. 128). Current research in this area focuses on the way people acquire and use new and existing knowledge and skills. Learning is viewed as an active, domain specific process that builds on prior knowledge (Shuell, 1990; Shuell, 1988).
To study and understand the complex and collective nature of human learning, cognitive psychologists have incorporated new ideas and strategies from disciplines such as computer science and linguistics (Gagne & Glaser, 1987; Gick, 1986; Greeno, 1980; Shuell, 1986). This fusion of ideas has led to a corresponding refinement in the research methods used by cognitive scientists as they infer learning from observable behavior. Still primarily experimental in nature, these new methods allow for a richer understanding of subject thought processes than was possible using the rigidly experimental procedures employed by behaviorists. These new methods include tracking eye movements when reading or solving problems and having subjects describe what they are thinking when working on a problem (Ericsson & Simon, 1984; Resnick, 1985). Due to the realization that learning is a complex, largely unobservable, inferential process, investigators have adjusted their research methods to encompass more than the measurement of specific, simple behaviors.

Many cognitive psychologists and educational researchers recognize that the depth and organization of existing knowledge influences the acquisition and application of new knowledge as learners structure and restructure knowledge based on their prior knowledge, beliefs, and assumptions (Anderson, 1984; Bransford & Johnson, 1972, Shuell, 1986). Although early cognitive
research largely focused on short and long term memory, a recent and productive aspect of this research has sought to understand how individuals with differing levels of expertise approach and solve problems within specific domains (e.g. Chi, Feltovich & Glaser, 1981; Glaser, 1984; Voss & Post, 1988). In the following paragraphs, I will discuss several significant aspects of this research on learning and relate it to understanding and teaching art.

**Domain-Specific**

Thirty years ago behaviorists believed that learning relied more on general than specific skills, and, therefore, the context in which behavior occurred was incidental. Many investigators now agree that "thinking at its most effective depends on specific, context-bound skills and units of knowledge that have little to do with application to other domains" (Perkins & Salomon, 1989, p. 19). For example, painting students usually learn the "fat over lean" rule for applying oil paint to a prepared ground wherein paint containing more oil per pigment should only be applied over a color containing a leaner oil to pigment ratio (Mayer, 1970). Reversing the rule by applying lean over fat paint will cause the paint to slide, chip, or flake. Although the "fat over lean" rule is important, it has little application outside the specific area of painting. Learning and understanding

art, like learning and understanding in other domains, relies on specialized, domain-specific knowledge.

A now classic study by Ericsson, Chase, and Faloon (1980) further illustrates the importance of domain knowledge in learning. Investigators studied a college student who worked to remember a long string of numbers. Normally, individuals can remember from six to nine digits in a row, and the young man under study was no different than most at the beginning of the investigation. However, over the course of the study, he increased his ability to remember from seven to over 70 numbers in sequence. The explanation lay in the subject's extensive knowledge of running. He used his knowledge of running times, dates, and names to chunk together units of numbers which he then grouped for sequential recall (Bransford, et al., 1986). The possibility that the student was able to remember such a long string of numbers as the result of general thinking strategies was discounted when he could remember only seven letters in a sequence, no more than average.

Subsequent studies conducted on differences in expert and novice problem solvers further support the view that learning is domain-specific (de Kleer & Brown, 1981; Ericsson & Polson, 1988; Lesgold, et al., 1988; Mayer, 1983; Voss, et al., 1983). While some kinds of understanding may be more general and transferable than
others, most learning occurs within the context of specific domains.

The Role of Prior Knowledge

Learning is cumulative in that what one learns is built on what one already knows (Anderson, 1984; Shuell, 1986). The more one knows about a particular subject the easier it is to learn, understand, connect, and recall information in the domain. A study by Bransford and Johnson (1972) illustrates the importance of prior knowledge to understanding. In this study, the investigators presented five groups of subjects with an ambiguous passage. The groups were given various levels of information in the form of pictures illustrating the passage. Some participants received a picture that clearly explained the ambiguous passage while others were shown an illustration that only partially explained it. Other participants received no pictorial assistance at all. The results showed that the participants' understanding of the ambiguous passage directly related to the kind of pictorial clues they were given. In other words, being able to place the passage in a specific context helped the participants understand and recall it. Those participants' with prior knowledge about the ambiguous passage were able to understand it better than those without contextual knowledge. Having knowledge of a subject allows one to place new knowledge in an existing
framework. This prior knowledge framework organizes what one knows so new knowledge is easier to acquire and deeper understandings can be formed.

The importance of prior knowledge in understanding art can be illustrated by considering the work of Julian Schnabel in conjunction with the previous "fat over lean" rule. Schnabel paints with thick layers of oil paint applied over unstable and unprimed grounds (e.g. velvet). He routinely embeds broken plates and found objects in the paint in a seemingly naive way. These practices cause the paint to run, flake, and crack. Understanding of his work can be enhanced if the viewer has prior knowledge about Schnabel, in particular that he is an academically trained painter who knows exactly what will happen when the "fat over lean" rule is violated. Not knowing about the "fat over lean" rule or Schnabel's background may lead an art learner or viewer to conclude that Schnabel is a sloppy artist who knows little about painting. However, prior art knowledge allows for understanding that Schnabel is intentionally breaking rules, and these actions have meaning within the context of his work.

**Forms of Knowledge**

When researchers describe the knowledge needed for learning and problem solving in specific domains they often divide knowledge into specific forms. Many investigators make a distinction between conceptual and
procedural knowledge (see Prawat, 1989). Conceptual knowledge is knowledge of facts and concepts, whereas procedural knowledge includes strategies for carrying out a task or action.

Conceptual art knowledge includes knowing Edouard Manet was a French painter, knowing that chemical composition causes some pigments to absorb less oil than others, or knowing objects appear to diminish in size as they recede in the distance. Procedural knowledge, on the other hand, involves understanding how to look at Manet's painting *A Bar in the Folies Bergere* to discover its meanings, how to increase the fat content of lean oil paint, or how to make objects appear to recede in space.

Successful learning rests on the interaction between conceptual and procedural knowledge. Knowing that the primary colors are red, yellow, and blue is relatively meaningless unless one applies strategies for mixing other colors or recognizing the colors in works of art. Likewise, mixing paint by trial and error or naming colors in works of art becomes a useless exercise unless grounded within a suitable concept or principle. The facts, concepts, definitions, and principles of a domain mean little unless they can be applied in relevant situations. The reverse is also true: learning and understanding art is difficult if one only manipulates media or describes works of art without incorporating meanings, concepts, or
principles. Possession of both conceptual and procedural knowledge is fundamental to learning in a domain.

**Frames of Understanding**

Perkins and Simmons (1988) elaborate on the forms of knowledge discussed above by dividing understanding within a specific domain into four categories or schemata they call frames: the content frame, the problem-solving frame, the epistemic frame, and the inquiry frame (p. 305). They note that each frame contains both conceptual, procedural, general, and specific knowledge and together are used to classify, understand, and solve problems and tasks within domains. However, the authors caution that patterns of misunderstanding in these four categories restrict individuals with shallow knowledge from forming deeper connections and understandings within a specific subject area.

**Content frame.** The content frame contains the facts, definitions, and principles of a domain as well as the procedural knowledge needed to apply these concepts in useful situations. Perkins and Simmons (1988) stress the general and specific nature of information in this frame which overlaps other frames. When individuals with shallow content frames attempt to solve problems in a domain several patterns of misunderstanding are evident: the learner may have difficulty accessing knowledge (p.
Problem-solving frame. This frame contains general and specific strategic knowledge for solving problems as well as "beliefs about problem solving, and autoregulative processes to keep oneself organized during problem solving" (Perkins & Simmons, 1988, p. 305). Lack of knowledge within this frame may cause individuals to approach problems in a trial and error fashion, proceed by guessing, or make stock responses.

Epistemic frame. This frame closely builds on knowledge from the content frame and involves general and specific ways of knowing within a domain. Weaknesses in the epistemic frame may lead individuals with shallow domain understanding to rely on intuition above observation when solving problems, thus neglecting domain rules and confirming preconceptions (Perkins & Simmons, 1988, p. 312).

Inquiry frame. This frame provides the idea, beliefs, and strategies used to expand and challenge understanding within a domain. Perkins and Simmons (1988) disclose that this frame is perhaps the "hardest to cultivate through education" of the four frames discussed (p. 313). Here, patterns of misunderstanding may occur because individuals are taught problem-solving rather than problem-finding strategies. Furthermore, training may
produce students who have difficulties applying learning from academic to practical or novel settings, or fail to venture beyond "the boundaries of a theory or framework" (p. 313).

**Novice and Expert Comparisons**

A particularly rich area for understanding learning can be found in research that explores how individuals become experts in specific fields. These investigations seek to determine the features that distinguish novices from experts in particular problem situations (Adelson, 1981; Charness, 1981; Chase & Simon, 1973; Chi, Feltovich, & Glaser, 1981; de Jong & Ferguson-Hessler, 1986; Johnson, et al, 1981; and others). This novice/expert research has both reinforced and supplemented what is known about the nature of learning.

Researchers have found that with the exception of the particular subject matter, experts in physics approach and solve problems in ways that are remarkably similar to experts in math, medical technology, nursing, and other fields. In addition, experts solve problems in ways that are qualitatively different from the ways novices go about solving the same problems (Glaser & Chi, 1988). These differences distinguish experts from novices across all studied domains. Experts are different from novices in ways that relate fundamentally to the depth, structure, and organization of their domain knowledge. This leads
experts to approach, as well as, solve problems differently than novices.

In the following section, I will discuss what is known about differences in expert and novice problem solving capabilities and knowledge structures. To illustrate these differences, I describe how individuals with varying degrees of art expertise might approach art learning situations. It should be noted that art expertise is somewhat relative. Novices and experts represent opposite ends of a continuum, not dichotomous points on a scale. The art examples used below are intended to illustrate differing levels of art knowledge and understanding within the novice to expert paradigm. However, the degree to which individuals understand art depends on many factors, not solely those discussed.

Domain specific expertise. Expertise in one domain does not imply expertise in other areas. Glaser and Chi (1988) indicate there is little evidence that expertise is transferable across domains. Studies of problem solving in such diverse areas as medicine, political science, and taxi driving support this contention (Chase, 1983; Johnson et al., 1981; Voss & Post, 1988). The understandings of experts are deeper and broader than those of novices. Bereiter and Scardamalia (1986) point out that "people with little knowledge in a domain are compelled to deal
with knowledge as isolated fragments, only vaguely relatable to higher level principles” (p. 11).

Highly educated individuals are not, likewise, automatically art experts. Rather, expertise in art depends on the depth and organization of the individual’s art knowledge. Even expertise in a closely related field is no guarantee of expertise in art. While some forms of understanding are more general in nature, and therefore it overlaps with other art or non-art fields. Understanding art and solving complex art problems also requires specific, specialized knowledge of the domain. It includes understanding the causes of art movements, social and political events, and scientific achievements and their effects on the creation of subsequent artworks. Art experts understand, for example, that artists may manipulate color or subject matter for expressive reasons. Novice understandings of art, on the other hand, are fragmented and shallow. For example, novices may believe that the color red is always a warm color regardless of the hue and context in which it appears, or that works of art with similar subject matter always have the same meaning.

Perception of meaningful patterns and multileveled knowledge structures. Investigators have found that experts have highly specialized knowledge structures that allow them to see relevant patterns faster than less
expert individuals. Newell and Simon (1972) describe expert chess players' knowledge structures as "clusters of related pieces...each cluster stored as a single symbol" (p. 781). These clusters or chunks reflect the superior organization of the expert's knowledge base. In contrast, "the patterns novices recognize are smaller, less articulated, more literal and surface oriented, and much less related in inferences and abstracted principles" (Glaser, 1985, p. 10).

The organization of experts' knowledge structures allow them to see and represent problems in deep, coherent, and relevant ways. Expert understandings are based on principles and abstractions, and this organization allows them to make connections more readily than novices. On the other hand, "the knowledge of novices is organized around the literal objects explicitly given in a problem statement" (Glaser, 1984, p. 99). Furthermore, novices often lack knowledge of related principles that help experts organize and connect what they know.

The knowledge of art experts is highly structured and organized as well. Art experts may recognize specific works of art from a fragment of a whole or identify the creator of a particular work without ever having seen the specific artwork before. An art expert may see relationships between works of art by different artists or
connect stylistic traits to meanings. For example, an individual with a deep knowledge of art may connect aspects of Abstract Expressionist painting to Italian Renaissance art or distinguish the work of Manet from Impressionistic paintings. On the other hand, an individual with a novice understanding of art may see little relationship between Abstract Expressionism and Renaissance art or categorize Manet's paintings as Impressionistic merely because he lived at the same time as Monet, Degas, and Renoir. Novices may be able to categorize works of art by level of abstraction, subject matter, or time period but "they are ill-equipped to distinguish important details from unimportant ones" (Koroscik, 1990, p. 11).

Use of knowledge. Experts perceive problems differently from novices. While both types of individuals may be able to recall equal conceptual bits, "high knowledge individuals are much better at relating these events in cause and effect sequences that relate to the goal and subgoals of a problem solution" (Glaser, 1985, p. 11). Experts know what to do and how to apply what they know in problem situations. In contrast, novices' knowledge tends to be tied to specific contexts. They may have a sufficient amount of conceptual knowledge but may not know when or how to apply that understanding in new situations.
In art, novices may recognize warm and cool colors in works of art but may not relate the use of color to the interpretation of meanings (Efland, 1990). Experts, however, with a large, accessible base of conceptual and procedural knowledge, relate information and discover meanings not apparent to novices.

**Speed and accuracy.** Initially, experts take more time to address problems than novices, but in the end, solve problems faster and with greater accuracy than novices. Glaser and Chi (1988) indicate experts typically take more time to understand a problem, "whereas novices plunge immediately into attempting to apply equations and to solve for an unknown" (p. xix). They further hypothesize that the speed at which experts finally solve problems is the result of superior experience, practice, and the organization of their knowledge.

Understanding that art is a complex subject with multileveled meanings and interrelated concepts leads experts to be slower initially at interpreting meanings or solving problems. However, they end up solving problems quicker and more accurately than novices who fail to adequately plan or think through a solution. For example, a novice may approach the interpretation of Manet's painting *A Bar at the Folies-Bergere* quickly, settling on meaning from a superficial examination of formal elements and concluding that the work is about the depiction of
space within a shallow area. An expert, in contrast, may take time to study the painting and conclude that the work could be interpreted in several meaningful ways: (a) the painting could be connected to the work of earlier artists who manipulated spatial representation in novel ways; (b) it could be considered a comment on life in the late 19th century; or (c) it could be viewed as Manet's attempt to sum up his work in a single painting.

Short and long term memory. Ericsson, Chase, and Faloon's study (1982) described earlier demonstrated the ability of an individual with an extensive knowledge of running who could remember long strings of numbers over a long period of time. It is not unusual for experts to store bits of related information for long periods of time as well. It is hypothesized that experts' memory structures are not larger than those of novices, rather the memory of experts is organized in coherent and domain relevant chunks.

Evidence of superior long and short term memory can be seen in art experts as well. For example, art experts frequently remember the locations of a specific artworks or relevant passages of information although the details are not currently needed. Novices, on the other hand, may fail to remember relevant contextual information when required to apply prior knowledge to examining new works of art.
It is possible that the organization of domain-specific knowledge allows experts to store larger bits of information in their short term memory. Since novices know less about art and what they know is less organized and less coherent, they fail to make connections and see relationships which would allow them to remember information for either short or long periods of time (Glaser & Chi, 1988).

**Self-monitoring skills.** Experts are more aware of errors they make and frequently check their solutions to problems. Furthermore, experts seem to be aware of a problem's level of difficulty and will alter their effort to fit the situation. Experts "are more successful determining what they don't know and what to search for" (Koroscik, 1990). Novices, on the other hand, neither notice when they make mistakes nor distinguish easier from more difficult problems. Instead, novices approach problems as if they were all equally challenging (Chi, 1987). Art novices have difficulty determining whether or not their interpretations or solutions to art problems are valid or accurate.

**Constraints to Understanding Art**

By combining Perkins and Simmons' (1988) frames for representing knowledge with expert-novice categories, Koroscik (1990) has developed a framework for describing how individuals with varying degrees of art knowledge
might understand a specific work of art. I will use Koroscik's discussion of contraints to a learner's knowledge base (pp. 9-16) to illustrate how individuals with different levels of art knowledge might understand Manet's painting *A Bar at the Folies-Bergere*.

Four examples illustrate how a learner's knowledge base might be limited by the depth of his or her understanding of art: (a) naive concepts, (b) underdifferentiated concepts, (c) garbled knowledge, and (d) compartmentalized concepts.

**Naive concepts.** Learners with shallow understandings of art hold naive concepts that "often impede the acquisition of new understandings" (Koroscik, 1990, p. 10). A naive understanding of Manet might lead a learner to conclude that:

Manet did not pose the figures in his pictures. He painted them as he found them and as he saw them. Details were avoided because he wanted his picture to show what the eye could take in with a quick glance. (Mittler, 1986, p. 296)

In fact, Manet's completed paintings are tightly composed products of his studio. The objects included on the counter of *A Bar at the Folies-Bergere* alone contradict Mittler's assertion that Manet was unconcerned with details.

**Underdifferentiated concepts.** Learners with underdifferentiated concepts of Manet may not be able to "distinguish important details from unimportant ones"
(Koroscik, 1990, p. 11), and thus they may link Manet to Impressionism because he used similar brushstrokes and seemed to depict people outdoors or in informal situations. While Manet is often mentioned in connection with other Impressionist painters, individuals with deeper understandings might emphasize the differences between Impressionist paintings and Manet's work:

He was certainly not an impressionist. He never exhibited with the impressionist group; his aims were not compatible with theirs, much as they respected one another. Manet's firmly built structures of light and dark were mostly done indoors, after many preliminary studies; they have the formal diction of studio art, not the light, open qualities of plein-air painting. Atmosphere and local color were not his prime issues. And when he took what seems, on first glance, an "impressionist" subject, he was apt to load it with ironies and contradictions until its straight-forwardness evaporated. (Hughes, 1983, p. 81)

Garbled knowledge. "Newly acquired knowledge commonly gets mixed up in various ways" (Perkins & Simmons, 1988, p. 309) causing learners to get facts wrong and misinterpret information producing garbled knowledge (Koroscik, 1990). Garbled knowledge might account for the following statement:

Manet, one of the most honorable and gifted painters of the nineteenth century, was persecuted and died a nervous wreck at the age of fifty. (Craven, 1956, p. 199)

Although critics continually denounced Manet's work, he was respected by his peers and, as a measure of this esteem, was made chevalier of the Legion of Honor in 1881.
The critics did not, as implied, cause Manet to die a nervous wreck. Instead, Manet was stricken with locomotor ataxia, a disorder of the central nervous system sometimes associated with later stages of syphilis.

Compartmentalized concepts. A fragmented knowledge base may cause novices to fail to relate formal qualities or descriptive elements in a work of art with other contextual or interpretive meanings (Koroscik, 1990, p. 14). For instance, novices may focus solely on subject matter when examining Manet's painting thus connecting it with other works that contain mirrors, women, bar scenes, or other descriptive elements. By compartmentalizing concepts, novices may fail to relate the painting to another work which more closely resembles it in meaning such as the Velazquez painting, Las Meninas (Hamilton, 1986, Hartt, 1985).

Applications of Learning Research to Art Education

While learning occurs within the context of specific domains, logic suggests that some parallels exist between how individuals learn other subjects and how people learn and understand art. Unfortunately, most research in art education has focused on the development of pictorial imagery and basic manipulative skills in young children and adolescents (Kowalchuk, 1990). However, investigators in related areas of education and psychology now recognize that simply answering questions correctly is no guarantee
student understanding (Nickerson, 1985, p. 214). In art, children may be able to create remarkably sophisticated images without knowing what they made or how it relates to other works of art. In other words, students may be able to successfully manipulate media while actually learning very little about art.

Art is a semantically rich domain with a large body of knowledge and a long, diverse history. Understanding works of art requires prior knowledge of art, art history, and an active understanding of cultural differences (Parsons, 1990). Understanding art also demands that individuals possess both conceptual and procedural knowledge about art and that they be able to transfer this knowledge from one artwork or situation to another. Knowing facts, or having the ability to manipulate media, may lead to a limited kind of understanding, but a deeper understanding of art requires that individuals have an inter-connected, multifaceted knowledge of art.

Learning research is relevant to art teaching and learning in several ways. Although some believe creativity defies understanding and knowing art is not something that can be taught, cognitive conceptions of learning indicate that learning processes are remarkably uniform across many domains. While the subject matter is unique (i.e., domain-specific), it is likely that individuals learn about art in ways that are similar to
learning in other areas. Studies of expert-novice characteristics and problem solving processes suggest approaches to instruction that would develop deep understandings in any domain. Bereiter and Scardamalia (1986) explain that "even though elementary and secondary school educators do not usually think of their work as producing experts, they should be moving students in the directions of expertise, and so it is important to understand what that direction is" (p. 10). Understanding novice and expert problem solving strategies can also lead to more transferable general learning strategies. By applying learning research to understanding how individuals learn and understand art, art educators can move closer to curriculum, teaching, and assessment strategies that effectively engage students in developing deep art understandings.

Learning research can also be applied to art education in several other ways. While most learning research investigates learning from the pupil's perspective, art teachers can also be considered learners. With this perspective in mind, perhaps it is time to consider how art teachers come to understand the subject matter they teach. By using knowledge about how individuals learn in other domains, art teacher educators may be able to enhance the acquisition of knowledge about art and teaching in preservice art teachers. In addition,
art teachers hold conceptions of art and art teaching that function as personal theories. These beliefs and assumptions guide decisions and determine teaching practice (Anderson, 1989). If art teacher educators are to have a significant impact on the development of these conceptions of art and teaching, then the nature of cognitive learning should be addressed.

Current Conceptions of Teaching

While recognizing the contributions of earlier process-product research, current conceptions of teaching focus more on a cognitive perspective where teaching, like learning, is viewed as a complex, multifaceted process. Research on teaching conducted within this framework frequently places the teacher in the role of learner and applies what is known about learning to understanding how individuals become teachers. "Instead of trying to find relationships between teacher knowledge and student achievement, researchers have focused their energies on exploring the nature, form, organization, and content of teacher knowledge" (Grossman, Wilson, & Shulman, 1989, pp. 25-26). Researchers working within this area have studied teaching from several productive perspectives. Some investigators have focused on teachers' knowledge structures and understandings of subject matter and pedagogy. And, other researchers have explored the differences between novice and expert teachers within
specific domains. Each perspective has relevance for the study of art teaching.

Subject Matter Knowledge for Teaching

Results of learning research reveal that existing knowledge acts as a powerful influence on acquiring new knowledge and skills (Shuell, 1986; 1988). This finding is particularly relevant to the study of teaching since results of research in this area indicate teachers' prior subject matter knowledge represents a critical foundation in the practice of teaching (Calderhead & Miller, 1986; Elbaz, 1983; Grossman, 1989a; Leinhardt, 1986; Leinhardt & Smith, 1985; Shulman, 1986; Wolfe & Murray, 1990). Shulman (1986) explains the importance of content or subject matter knowledge in the following way:

To think properly about content knowledge requires going beyond knowledge of the facts and concepts of a domain...The teacher need not only understand that something is so; the teacher must further understand why it is so, on what grounds it...can be asserted, and under what circumstances our belief in its justification can be weakened and even denied. (p. 9)

Investigators have found that the content of instruction is shaped by what teachers know and do not know about the subjects they teach (Grossman, 1989; Wilson, 1988; Wilson & Wineburg, 1989). "Knowledge or lack of knowledge...can affect how teachers critique textbooks, how they select material to teach, how they structure their courses, and
how they conduct instruction" (Grossman, Wilson, & Shulman, 1989, p. 28).

Using interviews and observational data collecting methods, Wilson & Wineburg (1988) found that social studies teachers with different subject matter understandings varied in their perception of the role of factual knowledge, the place of interpretation, and the significance of chronology and continuity. Lack of subject matter knowledge (content knowledge) limited the teachers' acceptance of alternative interpretations and prevented them from "recognizing, and then forging, the connections between past and present" (Wilson & Wineburg, 1988, p. 537). Shallow or incomplete knowledge can greatly limit individuals' understanding and practice of instruction.

Calderhead and Miller's (1986) study of eight student teachers also focused on the value and influence of subject matter knowledge. By examining lesson plans, stimulated recall protocols, and student teacher assessment of pupil performance, the researchers found:

Although students themselves value a fund of high-level subject matter knowledge, both their own accounts of their teaching and their planning protocols suggested that their thinking about teaching was very much based upon their own practical experience in the classroom and their observation of and discussions with other teachers. (p. 26)

When their subject matter knowledge was incomplete or shallow, student teachers had difficulties integrating
what they knew about subject matter with knowledge of teaching.

Stein, Baxter, and Leinhardt's (1990) study of the mathematical knowledge held by an experienced teacher elementary and the effects of that knowledge on teaching illustrates the opposite end of an experience continuum. The teacher, Mr. Gene, completed sorting activities related to functions and graphing during an interview. The investigators drew inferences about Mr. Gene's knowledge of math content by comparing his responses and task solutions to a mathematics educator's performance on the same problems. Then a 25-lesson sequence on functions and graphs was taught by Mr. Gene and his performance was interpreted in terms of his content knowledge. The researchers found that Mr. Gene's lack of subject matter knowledge led to a narrowing of his instruction in three ways:

Lack of provision of groundwork for future learning in this area, overemphasis of limited truths, and missed opportunities for fostering meaningful connections between key concepts and representations. (Stein, et al., 1990, p. 659)

The researchers found that teachers with shallow, inadequately organized content knowledge taught "few, if any, conceptual connections, [made] less powerful representations, and over routinized student responses" (Stein, et al., 1990, p. 659). Supporting other investigations, this study substantiates the importance of
teacher subject matter knowledge in instruction at the elementary school level.

**Content knowledge in art teaching.** In art education, subject matter knowledge allows teachers to accurately connect and relate knowledge of history, culture, society, media, and methods to relevant teaching situations. Lack of subject matter understanding, on the other hand, can cause teachers to misinterpret and misinform students about art (Koroscik, 1990).

Artworks frequently have multiple meanings, and art problems may have more than one solution. Efland (1990) uses the following example to explain this point:

A painting may be seen as an exemplar of a given style, the embodiment of an ideal of beauty, or be seen as a symbol of the consciousness of an epoch, or as propaganda for church, state, or a social cause. Moreover, the same object can be interpreted as any and all of these. (p. 1)

A shallow knowledge of art may cause art teachers to fail to recognize that some works of art can be accurately interpreted in several ways, or they may assume that all interpretations are equally correct. Moreover, teachers with little art knowledge may make errors in understanding the meaning of artworks. If art teachers hold naive or inaccurate conceptions of subject matter, then the possibility exists that they will pass on these understandings to their students.
Pedagogical Content Knowledge

Teacher representations of instruction appear to rest on a complex interplay between knowledge of subject matter, students, pedagogy, and the contexts of teachings. "Researchers working in this area have found that teaching involves the translation of subject matter knowledge per se into subject matter knowledge for teaching" (Grossman, Wilson, & Shulman, 1989, p. 26). Teachers use their understandings of teaching to select and interpret subject matter that they believe will lead to student learning. Shulman (1987) uses the term pedagogical content knowledge to refer to a blending of subject matter knowledge and knowledge of teaching. In the past several years, other researchers have begun to study the interaction between pedagogical and subject matter knowledge as well (Elbaz, 1983; McEwan, 1987; Feiman-Nemser & Buchmann, 1985a; Wilson, 1988).

This association between practice and subject matter knowledge is also apparent in Wolfe and Murray's (1990) study of a student teacher. The investigators gathered data over a period of 16 weeks as the subject, Bonnie, taught in social studies classes. Using naturalistic inquiry, data collection included classroom observation, interviews with both student and cooperating teachers, and reflective journal keeping by the student teacher. Findings indicate the student teacher initially focused
more on the methods than the content of teaching. Bonnie had difficulty selecting and devising methods that "would convey the content and also be congruent with her initial stance" toward the subject (Wolfe & Murray, 1990, p. 15). The investigators concluded:

A student teacher's negotiation of a stance toward subject matter suggests that pedagogical content knowledge may be a type of knowing particularly vital to a teacher's ability to successfully give voice to content. (Wolfe & Murray, 1990, p. 44).

Dimensions of pedagogical content knowledge. Grossman, Wilson, and Shulman (1989) suggest four dimensions of pedagogical content knowledge that include content knowledge, substantive knowledge, syntactic knowledge, and beliefs about the subject matter (p. 27). Content knowledge refers to the facts, figures, principles, and concepts of a domain. For example, an individual with content knowledge (subject matter knowledge) of art may know about the relationship between Manet's paintings and the work of the Spanish painter, Diego Velazquez. Content knowledge of art may allow an individual to place Manet's painting "Olympia" within a tradition of reclining nudes that includes works by Giorgione, Titan, and Goya. Moreover, content knowledge of art may lead to understanding the difference between Manet's painting and the other works and why the painting was not originally well received when first exhibited.
Content knowledge allows individuals to make connections between concepts in the field and events outside it.

Substantive structures guide inquiry in the discipline (Schwab, 1978). A variety of substantive structures can exist at the same time within a discipline. In art education, for example, substantive structures include the notion of discipline-based art education, the notion of art instruction as the transmission of cultural heritage, and the notion that children can learn and understand art in ways similar to learning and understanding other subjects.

Grossman, Wilson, and Shulman (1989) define syntactical knowledge as "knowledge of the ways in which new knowledge is brought into the field" (p. 29). The study of art includes syntactical knowledge of aesthetics and criticism, as well as the production of new works of art. In art education, syntactical knowledge refers to the ways inquiry broadens art teaching and learning in the field.

While teachers hold beliefs about the nature of education and students that influence how they approach instruction, teachers frequently treat their beliefs about subject matter as knowledge. These beliefs affect their teaching as well (Grossman, Wilson, & Shulman, 1989, p. 31). In art education teachers' beliefs about the nature of art or creative activity influence how art lessons are
structured and taught. For example, beliefs about art history formed in large college survey courses could prompt teachers to believe that art history cannot be taught to children younger than a particular age.

While the knowledge teachers possess about content and pedagogy fundamentally affects how they teach, it is overly simplistic to assume that teaching relies only on this interaction. As Grossman, Wilson, and Shulman (1989) explain:

The ability to transform subject matter knowledge requires more than knowledge of the substance and syntax of one's discipline; it requires knowledge of learners and learning, of curriculum and context, of aims and objectives, of pedagogy. It also requires a subject-specific knowledge of pedagogy. By drawing upon a number of different types of knowledge and skill, teachers translate their knowledge of subject matter into instructional representations. (Grossman, Wilson, & Shulman, 1989, p. 32)

**Expert-Novice Comparisons in Teaching**

Building on the psychological studies of expert-novice differences in problem solving, some educators have begun to study how expertise in teaching develops. Investigators reveal that expert and novice teachers approach teaching in ways similar to expert and novices in other fields (Berliner, 1986). Researchers examining expert and novice teachers in math, science, English, and social studies disclose that expert teachers have rich and deep knowledge of the subjects they teach and their understandings are organized in coherent patterns of
conceptual and procedural knowledge (e.g., Ball, 1988; Grossman & Gudmundsdottir, 1987; Hashweh, 1987; Leinhardt, 1986; Wilson, 1988). Due to the interaction of subject matter knowledge, pedagogical knowledge, and other variables, the study of expert and novice teachers presents difficulties not encountered by researchers investigating expertise in other domains. However, understanding what distinguishes successful from less successful teachers will help teacher educators better understand the complexities of teaching and more effectively design programs to prepare and develop teachers.

Constraints to studying teaching expertise. Several problems exist in studying expertise in teaching. The complexity of instruction makes defining expert teaching in particular subject areas difficult (Leinhardt & Putnam, 1986). After selection criteria has been established, it is a challenge to decide what aspects of teaching should be studied as well. Care must be taken to disassociate the selection of teachers from the tasks on which they will be compared. Moreover, expertise is confounded by teaching experience (Berliner, 1986). Defining and selecting expert teachers and distinguishing between experience and expertise present the most difficulties to studying novice and expert teachers.
Berliner (1986) observed that expert individuals in domains such as chess and sports are easily selected on the basis of medals and trophies they have won. However, selecting expert teachers is more difficult. Relying on students' performance on standardized tests to distinguish expert from less expert teachers excludes subject areas such as the arts that do not assess performance in this manner. Selecting teachers on the basis of recommendations from administrators and supervisors often reveals inconsistencies in the selection criteria. Moreover, teachers may be selected as successful teachers more for the image they present than for the quality of their teaching performance. For example, teachers are often selected as "teacher of the year" because they are more visible, contribute more in community service, or are better managers of student behavior (Berliner, 1986).

Many researchers seek to separate expertise from experience. While length of teaching service does not guarantee expertise, it must be acknowledged that experience does play a role in expertise in other domains. Runners, chess players, physicists, secretaries, and nurses spend time developing their knowledge and abilities. Berliner (1986) reports that "on the basis of the work we have started, we feel assured that at least some experienced teachers some of the time act like experts in other fields" (p. 12). Not all experienced
teachers are expert teachers, but experience must be considered when studying expertise.

Knowledge structures of expert and novice teachers. Leinhardt and Greeno (1986) propose that skill in teaching rests on two essential systems of knowledge which permit teachers to construct and conduct lessons. These knowledge frameworks refer to lesson structure and subject matter. "This knowledge is supported and partially controlled by significant knowledge of subject matter and is constrained by the unique circumstance or set of students" (Leinhardt & Greeno, 1986, p. 25). These knowledge structures are organized in flexible chunks of conceptual and procedural knowledge called schemata. Experts apply their schemata with little cognitive effort while novices' schemata, often shallow or incomplete, are difficult to apply to problem situations when needed (Leinhardt & Greeno, 1986; Leinhardt & Smith, 1985).

Planning and presenting lessons. Knowledge structures in the form of schemata are applied to constructing and presenting lessons "that transmit the content that needs to be learned" (Leinhardt, 1986, p. 29). Lessons experts create are clear, accurate, and rich in detail and example (Leinhardt, 1986). Novice lessons, on the other hand, lack a cohesive structure. Expert teachers' knowledge of pedagogy and subject matter allow them to construct lessons with alternative explanations.
Experts know different ways of presenting topics but are careful not to confuse students by using contrasting strategies at once. Leinhardt and Putnam (1986) observe:

The explanations that experts offer are cohesive and tightly connected to the representations being used. The language of experts' explanations is also cleaner, with the precise use of terms and an avoidance of multiple meanings. Novices' explanations, in contrast, are often perfectly intelligible to someone who already knows the topic but are incomplete and disjointed to a student first learning the material. (p. 29).

Expert's lessons are constructed around a flexible core of activities which form the routines of the classroom. These activities can alter in sequence but include presentations or reviews of information, some form of focused discussion, shared practice of problems, interactive seatwork, and independent seatwork (Leinhardt & Greeno, 1986, p. 93). Routines allow expert teachers to distribute supplies and work quickly and efficiently so that more time can be spent on actual instruction and practice. Novice teachers have trouble managing activities and are inconsistent regarding routines. It should be stressed that not all expert teachers plan and execute lessons the same way, but they are more versatile in planning and making connections between activities than are novices.

Research methods. Methods used to explore differences between novice and expert teachers often take the form of extended comparative case studies (Baxter,
Expert teachers are selected by recommendation or by their students' performance scores on achievement tests. Novice teachers are usually preservice teachers enrolled in field experience courses (Leinhart & Greeno, 1986). Studies are carried out on limited numbers of teachers, and data are gathered through interviews and classroom teaching observations. This method of data collection allows for an in-depth comparison of expert and novice knowledge and approaches to teaching in actual classrooms.

**Implications of Teaching Research for Art Education**

Good art instruction demands that teachers understand many aspects of art, culture, history, and philosophy. Furthermore, art teachers must integrate this understanding with knowledge of other aspects of teaching, pupils, and curriculum. Methods classes and field experiences emphasize the practical aspects of art teaching while assuming student-teachers' subject matter knowledge base to be at least adequate (Sevigny, 1987). Art teacher educators have traditionally relied on novice teachers to make the connections between pedagogical methods and art content. However, research on novice-expert characteristics tells us that connections are difficult to achieve in novice problem solvers. Moreover, learning research suggests that learners will not make connections without help (Leinhardt, 1986; Perkins &
Salomon, 1988). If we think about art teaching as complex decision making or problem solving, Dufresne's (1988) conclusion is relevant to training art teachers as well as physicists:

It seems that students, especially those having difficulties, spend far too much time on faulty paths, reinforcing habits that are detrimental to becoming good problem solvers. This practice is often excused with statements to the effect that "struggling" with problems is a part of the learning process. It is time to change this view. We enthusiastically provide students with the conceptual basis of a domain, yet we adopt a hands-off policy when it comes to the complex knowledge required to effectively apply these concepts in problem situations. To help our students effectively use their conceptual knowledge we must begin to give more attention to the organization of this knowledge and its relationship to the procedural knowledge so critical to problem solving. (p. 9)

Successful teaching appears to rest significantly on the depth, organization, and integration of teacher subject matter and pedagogical knowledge. The way knowledge is structured and used distinguishes novice from expert teachers. While research has shown that learning is domain-specific and teachers are experts within their domain speciality, expert teachers share general traits across all domains. It is reasonable to suggest that expert and novice art teachers exhibit features similar to those discussed above. By considering and using results of research on learning and teaching, investigators can move closer to delineating how art teacher knowledge and understanding influences the practice of teaching.
CHAPTER III

METHODOLOGY

As previously discussed, a study with three phases was designed to explore the effect of art content understanding, contextual information, and pedagogical experience on planning and teaching. The design, participants, materials and procedures for each phase are discussed below.

Phase One: Lesson Plan Writing

To examine the effects of teaching experience and curriculum materials (Contextual Information) on lesson plan development, preservice and inservice teachers planned a lesson that incorporated a studio activity with study of a specific work of art (key artwork).

Design

A two-way between-subjects experimental design was employed in which the participants were asked to plan a lesson about Manet's painting, A Bar at the Folies-Bergere (Plate I). Between-subject variables included four levels of Teaching Experience (beginning art education students, intermediate art education students, student teachers, and experienced teachers) and two levels of Contextual
Information (fragmented and integrated). While the instructions, lesson plan format, and supporting materials remained the same, the Contextual Information oriented participants toward the preparation of their lesson in conceptually different ways. Following the lesson plan writing activity, the participants completed two brief background questionnaires to elicit basic information about art training and pedagogical experiences.

Participants

Four groups of volunteer participants were obtained from two sources: undergraduate art education students at The Ohio State University and elementary art teachers in the Eau Claire Public Schools, Eau Claire, Wisconsin. The subjects were contacted in person or by phone and asked to participate in this phase. Although the participants understood that their involvement in the study was voluntary, they were offered a free workshop on jewelry-making to compensate for their time. All preservice and experienced teachers understood that they may be asked to participate in the remaining two phases of the study.

The participants ranged in experience from beginning art education students with little or no teaching experience to individuals with five or more years of teaching experience. Three groups of volunteer participants were solicited from preservice art education majors enrolled in courses required by the Department of
Art Education for teaching certification. Representing individuals with little pedagogical experience, the first group was composed of 22 students enrolled in a beginning art education course that focused on curriculum development. To keep group sizes relatively equal, 12 methods students were randomly omitted from possible participation in the remaining phases of this study prior to Phase Two. All nine students enrolled in a clinical teaching experience course constituted the second group of participants, and eight individuals in the middle of their student teaching field experience comprised the third group of participants. All six elementary art teachers in Eau Claire, Wisconsin and two additional elementary art teachers from Columbus area public schools participated in the lesson plan writing activity. Since all Eau Claire and Columbus area participants had taught at least five years, they were defined as experienced teachers. The group of experienced teachers were distinguished from the undergraduate student participants, in average age and the size and location of undergraduate institution attended. Experienced teachers attended colleges and universities in the mid-west with enrollments smaller than 50,000 students. Due to the limited number of individuals available in each group and the voluntary nature of teacher participation, no attempt was made to control gender, race, or age. The majority of participants in
each group were female. Overall, 20 percent of the participants were male. The four groups of teachers participating in Phase One are represented by Figure 1.

**Materials**

Materials for this phase of the study included reproductions of the key artwork, supporting artwork notebooks, lesson plan folders, and optional reference materials. All materials were pilot tested by individuals representing the four levels of teaching experience investigated in the study.

**Key artwork.** To investigate the effect of prior art knowledge on teaching practice, careful selection of a key artist and artwork was essential. The key artwork needed to draw on actual art knowledge commonly learned and held by the participants. Sevigny (1987) indicated most art education majors take an average of 9.4 semester hours of art history including two art history survey courses.

*A Bar at the Folies-Bergere* (Plate I) by Edouard Manet was selected as the key artwork both for significance in the history of art and its coverage in art history texts and survey courses (i.e. Gardner, 1975; Hartt, 1985). In addition, the work of art contains layers of meaning that vary according to the viewer's knowledge of the artist and his time. A shallow interpretation of the work might include only a discussion of the central figure of a woman, the formal placement of objects, or the artist's
### Study Participants

<table>
<thead>
<tr>
<th>Teaching Experience of Participants</th>
<th>PHASE 1 * Lesson planning</th>
<th>PHASE 2 Lesson presentation and follow-up interview</th>
<th>PHASE 3 Art and pedagogical knowledge interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1: Beginning art education students</td>
<td>n = 10</td>
<td>n = 2</td>
<td>n = 2</td>
</tr>
<tr>
<td>Group 2: Intermediate art education students enrolled in a clinical teaching course</td>
<td>n = 9</td>
<td>n = 3</td>
<td>n = 3</td>
</tr>
<tr>
<td>Group 3: Student teachers</td>
<td>n = 10</td>
<td>n = 3</td>
<td>n = 3</td>
</tr>
<tr>
<td>Group 4: Experienced teachers</td>
<td>n = 10</td>
<td>n = 2</td>
<td>n = 2</td>
</tr>
</tbody>
</table>

\* Only the lesson plans of individuals participating in all phases of this study were analyzed.

**Figure 1. Study Participants.**
technique. On the other hand, individuals with a deeper knowledge of art and this artwork might infer causal relationships or include reference to historical context and aesthetic concepts in discussions and interpretations.

**Supporting artworks.** Because teachers often compare and contrast works of art when presenting lessons, related artworks were selected to accompany the key artwork. Supporting images were drawn from the following categories: (1) other paintings by Manet with similar subject matter (Plates II-IV); (2) earlier works of art compared to the key artwork by experts (Plates V-VII); (3) works of art with similar subject matter by contemporaries of Manet (Plates VIII-X); and, (4) 20th century works of art never discussed in relation to the key artwork but related in formal or descriptive ways (Plates X-XIII). Reproductions of the supporting artworks were photocopied in color, randomly ordered, and assembled in notebooks. Participants understood they could choose works of art from these notebooks to support and reinforce their lesson focus and objectives.

**Lesson plan folders.** Each participant received a folder containing an overview of task instructions, a page of contextual information, a lesson plan form, and two brief questionnaires.

The Contextual Information, an independent variable, provided participants with information about Manet and A
Plate III. Edouard Manet, *Luncheon in the Studio*, 1868, oil on canvas, 46 1/2" x 60 5/8", Bayerische Staatsgemaldesammlungen, Munich.
Plate IV. Edouard Manet, *Study for a Bar at the Folies-Bergere*, 1881, oil on canvas, 18 1/2" x 22", Stedelijk Museum, Amsterdam.
Plate V. Jan van Eyck, The Arnolfini Wedding, 1434, oil on canvas, 32 1/4" x 23 1/2", National Gallery, London.
Plate VI. Jean-Auguste Dominique Ingres, Comtesse d'Haussonville, 1845, oil on canvas, 53 1/4" x 36 1/4", Frick Collection, New York.
Plate VII. Diego Velazquez, *Las Meninas*, 1656, oil on canvas, 10'5" x 9' 1/2", Museo de Prado, Madrid.
Plate VIII. Edgar Degas, *Cafe-Concert at the Ambassadeurs*, 1876-77, pastel on monotype paper, 14 1/2" x 10 5/8", Musee des Beaux-Arts, Lyons, France.
Plate IX. Gustave Caillebotte, *In a Cafe*, 1880, oil on canvas, 155cm x 115cm, Musee des Beaux-Arts, Rouen.
Bar at the Folies-Bergere (Appendix C). Two types of information were developed. While each page contained parallel factual information, participants randomly received either conceptually fragmented or integrated information. Drawn directly from writing aimed at novice art learners, the fragmented information page reflected a simple, factual, and shallow explanation of Manet and the painting. In contrast, the integrated contextual information, drawn from writing aimed at art experts, focused around the central concept of the active viewer.

A single page of instructions was attached to the contextual information and lesson plan pages (Appendix D). These instructions summarized the directions that were read as the procedures were explained.

The lesson plan form conformed to formats conventionally used in art education, and included space to write lesson objectives, list supplies, and describe the presentation of the key artwork, the studio activity, and the assessment procedures (Appendix D). Additional blank paper was available if the space provided was insufficient for a participant's needs.

The subjects concluded this phase by completing two questionnaires (Appendix E). The first questionnaire asked the participants to describe their knowledge of Manet and familiarity with his work, while the second questionnaire provided information about the participants'
art education training and teaching practices. Questionnaire responses helped to develop a preliminary picture of the participants' art and educational training and experiences.

Optional reference materials. Teachers often refer to texts or other materials to provide content information when developing lessons. Therefore, reference materials were assembled and available to the participants. These materials included books about Manet, a notebook with excerpts of articles about the artist and the painting, and art education textbooks (Appendix F). Teachers were not directed to use the resources in any. However, records were kept of the reference materials the participants used. These resources did not confound the results of the activity since all teachers were given equal access to the materials and were encouraged to make use of them. Prior content knowledge, especially when superficial, often constrains the understandings that are formed about works of art (Koroscik, 1990). Consequently, it is unlikely that resource materials alone will deepen understandings unless participants are directed to use them in specific ways.

Procedures: Phase One

Since teachers participated in this phase on different dates and in different locations, a script was prepared to introduce the activity and convey instructions
(Appendix A). All procedures were pilot tested by a group of individuals representing the four levels of teaching experience examined in the study. Participants were seated at tables with ample room to work, and reproductions of the key artwork were posted so that all participants had direct eye contact with the artwork.

First, subjects were asked to read and sign a standard consent form for participation in research involving human subjects (Appendix B). They understood that identities would be kept confidential as responses were analyzed and discussed.

The items in the subjects' folders were then described and the lesson writing task was outlined. Teachers were told to aim their lesson at a class of upper elementary-aged students. Since some participants would later be asked to teach the lesson they planned, the teachers knew the lesson should be similar in structure to lessons they normally develop. However, participants were instructed to follow the lesson plan format provided since similar formats would assist in data comparison. Furthermore, the participants were asked to plan the lesson in as much detail as possible so that a clear understanding of the lesson could be gained.

Blank paper was available to the participants as scrap or extra writing space, but they were asked to place all paper in the folders at the close of the activity.
Even scrap paper helped provide a picture of lesson planning procedures.

Participants understood that they must draw on their own knowledge of art and teaching while developing lesson ideas. However, they could refer to any of the optional materials as well. A description of the reference materials was given, and the subjects were instructed on the procedure for citing references in the plan.

Since teachers often compare and contrast works of art in lessons, the use of the supporting artwork notebooks was described. Participants understood they could use as many images from the notebook as they wished to support and reinforce their lesson objectives.

Each page in the lesson plan form was reviewed and opportunities for questions were provided. Before beginning the activity, the participants were instructed to read the pages attached to the lesson plan form that summarized the instructions and provided some basic background information about the work of art.

No time limit was placed on lesson development and writing, but participants were informed when an hour and a half had passed. Pilot results suggested that most subjects would complete the activity within two hours. Finally, the subjects were instructed not to discuss what they were writing with anyone during the activity since discussion may influence planning.
When the participants finished writing the lesson plan, they proceeded to the background questionnaires. Questions asked by subjects could be answered throughout the writing activity.

**Phase Two: Lesson Presentation and Follow-up Interview**

To understand the pedagogical choices art teachers make when presenting previously planned lessons, a small sample of participants (two or three from each group), from the previous phase was asked to teach the lessons they planned. A follow-up interview provided opportunities for teacher reflection.

**Design**

The lesson presentation was observed and tape-recorded. Within the lesson observation, attention was placed on the relationship between the plan and the presentation of the lesson, the depth of lesson content, and any connections the teachers drew between artworks and studio activities. Semi-structured questions were employed in the follow-up interview as participants explained changes made between the written lesson plan and the lesson presentation and assessed the success of the lesson (Appendix G).

**Participants**

Ten teachers, at least one individual from each level of Teaching Experience and Contextual Information participated in this phase of the study. The proportion
of male to female participants (20% to 80%, respectively) in this phase conformed to the portions in Phase One. Since involvement in the remaining two phases would require several hours of time, individuals were contacted by phone and asked to voluntarily participate. Pseudonyms were given to all participants to protect their identity (Figure 1).

Materials

Few materials were needed for this stage of the study, since most of the data was collected through tape-recorded observation. However, each participant was provided with large, 18" x 24", reproductions of A Bar at the Folies-Bergere and oversized, 11' x 17", color photocopies of the supporting artworks needed for the presentation of his or her lesson. Since the first level of participants, beginning art education students, did not regularly teach a population of students, an elementary school in central Ohio agreed to allow two individuals to teach the lessons they planned to classes of fourth grade students. Supplies and materials needed to conduct the lessons were provided to these participants.

Procedures: Phase Two

All participants were contacted by phone, and a convenient time and date was arranged to observe the presentation of the lesson, and the follow-up interview was conducted as soon as possible following the lesson
presentation. So that responses could be compared, a set of prepared semi-structured questions (Appendix G) encouraged the participants to reflect on their recent lesson presentation. Both the lesson presentation and the follow-up interview were tape-recorded.

**Phase Three: Content Knowledge Interview**

To gain an understanding of the participant's art knowledge and approaches to pedagogical tasks, each of the 10 teachers completed sorting activities, discussed art content, and elaborated on typical lesson construction in upper elementary art classes.

**Design**

Phase Three consisted of a structured interview. Participants responded to direct questions and completed several pilot-tested sorting activities to provoke discussion and clarify the art and pedagogical understandings they held.

**Participants and Materials**

The same individuals who presented lessons in Phase Two also participated in Phase Three of this study. The materials for this phase focused on the interview script (Appendix H) and featured small color reproductions of the supporting artworks used in the previous phases, color photocopies of other works of art by Manet, and statements about Manet and the painting (Appendix I). As in previous phases, interviews were tape-recorded and transcribed.
Procedures: Phase Three

Individual content knowledge interviews were conducted at a convenient time following the lesson presentation and follow-up interview. Participants were told that their responses would provide insights into how art teachers think about art content when they develop and plan lessons. Interview questions focused on three areas: art understanding, pedagogical decision-making, and pedagogical content knowledge.

Art content understanding. Interview questions in this area focused on the form and substance of art content understanding. First, the depth and organization of a participant's art knowledge was explored through two sorting activities. An image sort task asked each teacher to arrange the supporting artworks into groups that made sense in relation to the key artwork. The participants then fully explained how they organized the images and how the images related to A Bar at the Folies-Bergere. Then, every teacher repeated the activity by resorting and describing new categories.

Twenty statements about Manet and the key artwork drawn from literature written for art novices and experts provided content for an idea sorting task (Appendix I). Participants first read through the statements and placed them into two categories: statements that matched and did not match what they understood to be true about Manet and
the painting. Each participant then placed the matching statements in a continuum from the statements that contained the simplest ideas to the statements that contained the most complex ideas. The participants discussed their choices with the interviewer and provided reasons for grouping statements into categories and levels of complexity.

Depth of content understanding was further explored through questions that examined each participant's knowledge of Modern art and Impressionism. Several scholars consider Manet's shift from a passive to active viewer a key element in the development of Modern art (Cachin, 1983; Hartt, 1985). Therefore, a portion of the interview explored the nature of Modern art and Manet's part in its development. Furthermore, novices tend to place Manet exclusively within the Impressionist tradition. However, Manet's placement within this genre is far from clear cut. Experts generally distinguish his work from the work of other Impressionist artists. Participant explanations of this relationship provided further insights into the depth their art knowledge.

Pedagogical decision-making. This aspect of the interview focused on the pedagogical decisions teachers make. Participants were asked to relate decisions made in the image and idea sorting tasks to art content and methods for teaching upper elementary-aged students.
Secondly, subjects developed alternative lesson ideas that utilized *A Bar at the Folies-Bergere*. Finally, the participants discussed how they usually plan lessons and elaborated on the factors that influence their planning and teaching.

*Pedagogical content knowledge.* Participants were asked to explain how they use what they know about art to teach children. Answers reflected the participants' understanding of the organization and transformation of art content for teaching, a feature of teaching expertise.
CHAPTER IV
DATA ANALYSIS

Analysis Procedures for All Phases

Data analysis strategies generally recommended for analyzing qualitative data (i.e. Lincoln & Guba, 1985; Merriam 1988; Siedman, 1991) were combined with categories derived from previous research in learning, teaching, and understanding art. First, general themes and specific topics were identified for comparison from notes made during preliminary readings of the data and from a review of research questions examined in this study. Illustrations of general novice-expert characteristics, explanations of novice-expert differences in understanding art, and descriptions of pedagogical content knowledge provided a framework for data analysis as well (i.e. Glaser & Chi, 1988; Grossman, Wilson, & Shulman, 1989; Koroscik, 1990).

Data were analyzed within the context of specific phases, and the same procedures were followed in each phase. All interviews and observations were transcribed and checked for accuracy. Only lesson plans of individuals participating in all phases of the study were
examined, and responses were typed so that hand writing would not bias the analyses. Then, all data were copied twice. One set of data was reserved in binders for future use. The remaining two sets were placed in folders by participant and phase. Folders were designated either master or working copy.

Data from each phase of the study were divided into areas by topics or tasks. The substance of art content described by each participant was examined in each phase. References to formal elements, descriptive and interpretive qualities, historical context, and key art ideas and aesthetic concepts were noted. Statements about art content were then evaluated in each phase for complexity and accuracy. Sentences or phrases containing simple, factual information were categorized as lower-order idea units (e.g., "This painting was made in 1881."). Sentences or phrases incorporating related ideas and aesthetic concepts, or implying causality were classified as higher-order idea units (e.g., "Manet's use of reflection actively involves the viewer in the painting.").

In addition, content was analyzed for evidence of art misunderstandings or oversimplifications. Statements were considered accurate if the content was supported in writing by art historians or critics generally recognized as experts. For example, most experts agree that neither
Ingres nor Manet should be considered Impressionists. If a statement simply linked either Ingres or Manet with Impressionism then it was labeled as inaccurate. However, if Manet was classified as an Impressionist but his placement was qualified by other actual historical or contextual information, then the statement was labeled as oversimplified but somewhat credible.

Key words, phrases, and concepts from each type of contextual information presented to teachers in the study were identified (Figure 2), and all areas were then reviewed for possible influence of the experimental condition on responses. Use of identified information was noted. Particularly strong instances were tracked across phases. For example, if a participant indicated that Manet was most interested in depicting women and Paris in the Content Knowledge Interview (Phase Three), then other phases were examined for use of this phrase or idea as well.

Specifically stated references to learner interests, knowledge, and abilities were also noted in each phase. Concrete learner references were then examined for carry over to other phases of the study. For example, if a participant indicated that a specific concept was difficult for upper elementary-aged students to understand in the content knowledge interview, then this orientation was investigated in other phases as well.
Fragmented Contextual Information

Manet shared many ideas with the Impressionists. Manet was an influential figure in the development of Impressionism. Manet was primarily a painter of contemporary life.

Two subjects constantly appear in Manet's work: Paris and women.

Mirror reflection and the illusion of space within a shallow area.

Perspective. Ambiguous space.

From the reflection in the mirror, we realize that the man is standing as where are when we look at the scene.

Conceptually Integrated Contextual Information

Many artists and scholars acknowledge the importance of Manet's work to the development of Modern art.

Manet's use of modern subject matter, his method of paint application, and his use of space distinguish him from others.

Involvement of the viewer in the work of art.

Spatially complex. Reflection in the mirror.

The illusion that the surface of the painting extends into the viewer's space.

The canvas reflects our world.

Spectators take an active part in the painting.

Surface spatial qualities contrasted to concept of a window into space.

Figure 2: Key words and phrases from Contextual Information used to infer influence of the experimental condition for data analysis.
Analysis Procedures for Specific Phases

Data were further organized and analyzed by topic and task within each phase. These specific areas are described below.

**Phase One: Lesson Plan Writing**

Four areas were examined in the lesson plans: objectives, introduction of the key artwork, use of the supporting artworks, and description of the studio activity. Since a preliminary review of data suggested substantial differences between participants in the length of their lesson explanations, the number of separate idea units were first counted and descriptively compared within each area. Idea units were defined as "the smallest piece of information about something that can stand by itself" (Lincoln & Guba, 1985, p. 345). Consideration was given to whether these units were incomplete phrases containing fragmented ideas, or complete statements containing related, integrated ideas.

The text was further examined for flow, defined here as a logical progression of related ideas containing both general concepts and specific examples. Several prominent ideas from the lesson objectives were isolated, and evidence of carry over into other lesson areas was explored. For example, if a lesson objective mentioned mirror reflection, both the words and the use of mirrors were tracked from the introduction of the art content to
the description of the lesson evaluation. These passages were noted.

Summaries illustrating these areas were compiled, and comparisons were made between lesson plans to determine if differences existed between participants of varying teaching experience and/or as a result of the contextual information.

**Phase Two: Lesson Presentation and Follow-up Interview**

Three areas were examined in the lesson presentation: presentation of art content, introduction and explanation of the studio activity, and lesson closure. Analysis in the follow-up interview focused on the participant's self-assessment of his/her presentation of the planned lesson content.

**Lesson presentation.** So that differences between lesson presentations could be identified, the number and substance of separate idea units in each area were identified. Talk about art content was distinguished from non-content talk (e.g., preliminary announcements, management of student conduct). Statements containing art content were examined for depth and breadth and classified as previously described.

Like Phase One, the lesson presentation was analyzed for flow and carry-over between lesson areas. For example, if the introduction of the art content focused on the idea that art can reflect contemporary life, then the
studio activity and the closing of the lesson were examined to determine if they reinforced this idea. Prominent ideas identified in the previous phase were explored here as well.

The follow-up interview. Responses were investigated to determine the participants' understandings of the connection between content and pedagogical decision-making within their presented lessons.

Phase Three: Content Knowledge Interview

This phase explored three areas of the participants' understandings: art content, pedagogical decision-making, and pedagogical content knowledge. The same procedures described earlier to analyze data were used here as well. Comparisons were made in responses between levels of Teaching Experience and Contextual Information, and summaries were compiled for overall subject profiles.
CHAPTER V
RESULTS AND DISCUSSION

The findings of this study will be reported and discussed in two parts. First, the results of the written lesson plans, lesson presentations, and content knowledge interviews conducted with the 10 participants will be presented. The range of lesson ideas, treatment of art meanings, differences due to teaching experience, and the influence of the contextual information presented prior to the lesson plan writing activity will be examined within each phase. In the second section, results will be combined across phases as I discuss how two participants varied in their lesson planning, teaching, and responses to questions. Thus, an integrated picture will be constructed of a novice and an expert teacher's solutions to art teaching problems.

PART ONE
Phase One: Lesson Plans

The participants were asked to construct and write a lesson plan for a fourth or fifth grade class that focused on Manet's painting, A Bar at the Folies-Bergere, that included a studio activity. While teachers were oriented
to the lesson plan writing task with contextual information structured in different ways, reference materials were available to supplement the participants' knowledge of Manet as desired.

**Range of Ideas**

Despite the focus on a single work of art and a limited choice of supporting artworks, the participants developed a broad range of ideas in their lesson plans. Overall, lesson content varied from mirror reflections to scenes of contemporary life and dining out experiences. Lesson plans included references to formal and descriptive elements, interpretive meanings, and historical information in varying degrees. Active viewer involvement was mentioned in all five plans of the participants receiving contextually integrated information prior to the writing activity.

**References to formal meanings.** The 10 written lesson plans included a total 106 references to formal elements in works of art (Table 1). Participants mentioned color, composition, and space most frequently. For example, David, a student teacher, indicated he would use his supporting artworks to "talk about the creation of space on a flat surface."

Although mentioned often, participants rarely elaborated on the use of color in artworks. One of
Table 1. Number of references to formal meanings in lesson plans.

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Contextual Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fragmented</td>
</tr>
<tr>
<td><strong>Beginner Art Education Students</strong></td>
<td></td>
</tr>
<tr>
<td>Bath</td>
<td>14</td>
</tr>
<tr>
<td>Valerie</td>
<td></td>
</tr>
<tr>
<td><strong>Intermediate Art Education Students</strong></td>
<td>2</td>
</tr>
<tr>
<td>Anne</td>
<td></td>
</tr>
<tr>
<td>Laura</td>
<td></td>
</tr>
<tr>
<td>Kelly</td>
<td></td>
</tr>
<tr>
<td><strong>Student Teachers</strong></td>
<td></td>
</tr>
<tr>
<td>David</td>
<td>23</td>
</tr>
<tr>
<td>Greg</td>
<td></td>
</tr>
<tr>
<td>Alice</td>
<td>4</td>
</tr>
<tr>
<td><strong>Experienced Teachers</strong></td>
<td></td>
</tr>
<tr>
<td>Pam</td>
<td>20</td>
</tr>
<tr>
<td>Suzanne</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>63</td>
</tr>
</tbody>
</table>
Laura's (an intermediate art education student) five lesson objectives illustrates this point:

Given [the three] art exemplars, students will be made aware of the artist's use of color and light. Laura failed to specify what aspects of color and light would be stressed or how the artists' use of these elements influenced meanings in their works.

Rather than listing formal meanings discretely, some lesson plans referred to composition in conjunction with other formal elements or subject matter. To illustrate, Pam, an experienced teacher, explained that her students would learn to arrange "subject and use of color to create a sense of space in a composition." And Beth, a beginning art education student, wrote that she would have her students focus on the figures in the painting, use of color, and changes in value. Although references to the elements and principles of design occurred frequently in all lesson plans, most participants failed to explain how they intended to relate the discussion of formal meanings to other types of understandings in the artworks or activities of the lesson.

References to descriptive meanings. In addition to formal meanings, all participants referred to subject matter or descriptive meanings in their lesson plans. Subject matter had a more central place in the lesson plans than did the elements and principles of design. The
plans mentioned descriptive meanings a total of 81 times, which is less than the number of formal references (Table 2). Alice's (a student teacher) lesson plan illustrates this point. She indicated that her students would describe the key artwork in terms of "subject matter, composition, colors, and technique of [the] painting." However, her explanation of how she intended to introduce The Bar at the Folies-Bergere included:

Manet's interest in depicting [the] contemporary life of his time will be emphasized because the students will create a drawing of their impression of a moment [in] contemporary life that relates to today and their own life experiences.

All sections of Alice's lesson concentrated on subject matter. She referred to contemporary life when discussing the key and supporting artworks, and her studio activity reinforced this focus as the students drew scenes of contemporary leisure activities.

Kelly, an intermediate art education student, also focused on descriptive meanings when she wrote:

We will discuss the subject matter... what we see occurring, who or what things... we see, where is this event occurring, what is happening.

Kelly continued to emphasize descriptive aspects in her explanation of the use of the supporting images in her lesson. Using other paintings by Manet, she wrote:

[The] supporting works will provide a theme. All are related to dining. Look at similar subject matter.
Table 2. Number of references to descriptive meanings in lesson plans.

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Contextual Information</th>
<th>Fragmented</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Art Education Students</td>
<td>Beth</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Intermediate Art Education Students</td>
<td>Anne</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Laura</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Student Teachers</td>
<td>David</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Alice</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Experienced Teachers</td>
<td>Pam</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Suzanne</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>40</td>
<td>41</td>
</tr>
</tbody>
</table>
Although often non-specific, references to the barmaid and the reflected figure of the man received the most subject matter attention in the lesson plans. For example, Greg, a student teacher, indicated he would "point out the back of the lady and the man's face with the top hat next to her." Greg wrote sample questions he intended to ask students that included additional references to the barmaid and customer:

Is this another woman? How can you tell? Where is the bottom of her dress? What about the man? Where is he?

Although they regularly failed to elaborate, most participants consistently focused on descriptive meanings in their lesson plans.

References to historical meanings. Mentioned less frequently than either formal or descriptive meanings, nine out of ten participants indicated they planned to include historical information in their lesson presentations (Table 3). However, most references were non-specific and often the participants failed to elaborate on exactly what information they would present about Manet and his painting. Beginning and intermediate art education students and student teachers indicated they would present historical information in a lecture form. The following statements are representative of how preservice teachers would introduce this information in their lessons:
Table 3. Number of references to historical meanings in lesson plans.

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Contextual Information</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fragmented</td>
<td>Integrated</td>
</tr>
<tr>
<td>Beginning Art Education Students</td>
<td>Beth</td>
<td>4</td>
</tr>
<tr>
<td>Intermediate Art Education Students</td>
<td>Anne</td>
<td>1</td>
</tr>
<tr>
<td>Student Teachers</td>
<td>David</td>
<td>7</td>
</tr>
<tr>
<td>Experienced Teachers</td>
<td>Pam</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>20</td>
</tr>
</tbody>
</table>
The students will listen to a lecture by [the] teacher on Manet and his background. (Alice, a student teacher)

The students will listen to a short lecture about the painter, Manet, [and] look at one of [his] works. (Beth, a beginning art education student)

Start by explaining something about Manet and his works. (Anne, an intermediate art education student)

Lacking pedagogical proficiency, it is possible that the students' recent experiences in art history lecture courses influenced their reliance on lecture as a means of including historical content in their lessons. If this premise is accurate, then art history courses provide not only information about artists and artworks but also serve as pedagogical models for novice teachers.

**References to interpretive meanings.** Only three of the 10 participants referred to interpretive meanings in their lesson plans (Table 4). Mood was cited by both experienced teachers' (Pam and Suzanne) as well as by an intermediate level art education student (Laura). Differences, however, exist in the use of the interpretive meanings in these lesson plans.

Unlike the more experienced teachers, Laura did not expand on or explain the interpretive qualities she indicated exist in Manet's painting. Laura assigned an inanimate character to the barmaid when she wrote:

Manet's barmaid has about as much personality as the bottles around her. He portrays her as just another object.
Table 4. Number of references to interpretive meanings in lesson plans.

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Contextual Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fragmented</td>
</tr>
<tr>
<td>Beginning Art Education Students</td>
<td>Beth</td>
</tr>
<tr>
<td>Intermediate Art Education Students</td>
<td>Anna</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Teachers</td>
<td>David</td>
</tr>
<tr>
<td>Experienced Teachers</td>
<td>Pam</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>
Laura neither described the qualities that supported this conclusion nor carried over this interpretation to other parts of her lesson.

Both experienced teachers referred specifically to mood in their plans. Although failing to elaborate, Pam related formal elements to interpretive meanings as she cryptically wrote:

More texture = more activity/energy
Smooth texture = calmer, [quieter] mood

In contrast, interpretive meanings acted as a unifying theme throughout Suzanne's lesson. Her description of the studio activity in her lesson included the following direction:

[The] students will be instructed to think of a situation in which they felt or would feel out of place or where their mood did not reflect that of those around them.

The remaining seven participants' lesson plans included no references to interpretive aspects of the key and supporting artworks, instead they focused on either formal or descriptive meanings.

Reinforcing Learning: The Studio Activity

Eight of the 10 participants in this study indicated their students would draw as part of the studio portion of the lesson (Figure 3). However, when examined closely, the studio activities of preservice and experienced teachers varied subtly in content. Participants with little or no teaching experience developed studio
<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Contextual Information</th>
<th>Fragmented</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beginning Art Education</strong></td>
<td><strong>Beth</strong> Students draw a person from a photo and color with crayons.</td>
<td><strong>Valerie</strong> Students make drawing that either shows space or absence of space. Viewer must seem to be a part.</td>
<td></td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Art Education</td>
<td><strong>Anne</strong> Using hand mirrors, students draw something in the room that is reflected in their mirrors.</td>
<td><strong>Laura</strong> Emphasis is on reflected images as students draw then paint a still life with a mirror in it.</td>
<td><strong>Kelly</strong> Students incise and print a foam plate with image of a dining out experience.</td>
</tr>
<tr>
<td><strong>Students Enrolled in</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Teaching Course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Student Teachers</strong></td>
<td><strong>David</strong> Students draw people in an elevator with emphasis on symmetry, color, and space.</td>
<td><strong>Greg</strong> Students make drawing that shows reflection in a mirror. Emphasis on active viewer.</td>
<td></td>
</tr>
<tr>
<td><strong>Alice</strong> Students draw scene of contemporary life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experienced Teachers</td>
<td><strong>Fam</strong> Students draw main figure and reflection with composition like key artwork.</td>
<td><strong>Suzanne</strong> Students draw a scene where they feel out of place or similar mood to key artwork. Must have same composition.</td>
<td></td>
</tr>
</tbody>
</table>

Figure 3. Studio activities in lesson plans.
activities that bore a superficial relationship to or focused on a single aspect of Manet's painting. Beth's (a beginning art education student) explanation of her studio activity illustrates this point. Her complete description of the studio portion of her lesson includes no reference to Manet's painting or other works of art:

Students will look for pictures or photographs of people in settings they choose to recreate. Personal photos may be used or a combination of pictures, but preferably only one or two people involved in the scene. Since this is [a] fifth grade [lesson], the scene should probably [involve] a still or standing activity -to keep it simple. Moving figures are harder to accomplish. Students will make a drawing from the picture and scene that they choose. It should be finished as a fully developed drawing (yet simple enough for their level) so that they may color it later with a clear vision of the outlines necessary. Next they [will] begin coloring the scene and person according to picture and/or ideas of their own. Crayons will be used because of time, [money], and difficulty of manipulation (less difficult than paint). When finished with their crayon works, we [will] discuss all of the finished works and cite similarities, differences, use of techniques, etc. describe and critique each other's works. Final works would be hung in [a] case [the] in hallway for the school to view.

Subject matter provides the only link between the studio activity and the key and supporting artworks in Beth's lesson. Indeed, this connection is so tenuous that A Bar at the Folies-Bergere would probably never be associated with the studio activity if read out of context.

In contrast, the experienced teachers in this study developed studio activities that closely resembled the key work of art in more than one way. For example, Suzanne's
(an experienced teacher) complete description of her studio activity emphasizes concern with deepening student understanding of Manet's painting:

After discussing and comparing Manet's and Ingres' paintings, students will use the composition of *[The] Folies-Bergere* to create their own drawing. Students will be instructed to think of a situation in which they felt or would feel out of place or where their mood did not reflect that of those around them. They will then put themselves in the girl's place in the composition and will change the background as well as reflection on the right. Students will begin their drawings with pencil and marker and add color with oil pastels.

Suzanne explicitly links the studio activity to the key and supporting artworks by having her students create a drawing that reflects similar a composition, subject matter, and mood. By relating formal, descriptive, and interpretive qualities in works of art, Suzanne teaches her students that art is understood in many interconnected ways.

**Understanding or Making: The Use of Artworks in Lessons**

An examination of lesson plans also revealed differences in how teachers planned to use the key and supporting artworks. Inexperienced teachers emphasized studio activities when describing how they intended to introduce the key and supporting artworks. For example, Beth, a beginning art education student, emphasized the studio activity in every section of her plan. Her explanation of how she would use *A Bar at the Folies-Bergere* began:
Students will view *A Bar at the Folies-Bergere* as a source of content matter in a studio activity they will create.

With a lack of focus, she wrote that her students would look at the people, the use of color, value changes, technique, the mirror, and the woman in Paris so they could create their own drawing. She explained the use of the supporting artworks by Van Eyck, Ingres, Manet, and Hanson in a similar way:

[The] supporting artworks will show people from or in different settings and the colors used to portray them. They are all realistic, just as Manet's, and will show a good range for the students' studio activity.

By focusing on studio activities in most sections of their lesson plans, works of art became visual examples of what Beth wanted her students to make.

Experienced teachers, in contrast, emphasized learning about Manet and connecting types of meanings when they described how they would use the supporting artworks. Not referring to a studio activity in these sections, supporting artworks reinforced the art ideas they planned to introduce. To illustrate, Pam, an experienced art teacher, wrote that she would use supporting artworks in the following way:

We will look at how the main subjects are arranged in the composition and how the objects and/or mirror in the background add to the information about the historical setting and/or help tell the story or set the mood....Show similarities of Degas'
Impressionistic style to Manet's...Show a work by Velazquez to see how he may have influenced Manet.

Pam stressed understanding Manet's painting rather than making a drawing. Her description includes references to formal, descriptive, historical, and interpretive meanings that explicitly relate to the key artwork.

These differences in the way artworks are used in lessons are important to recognize since approaches to teaching art send messages to students about the nature and function of art. If works of art are only used as illustrations of studio projects then it is likely that students will come to believe that art can only be understood by manipulating media.

**Effects of Contextual Information**

Before constructing their lesson plans, teachers read either fragmented or integrated contextual information about Manet and *A Bar at the Folies-Bergere* (Appendix C). Both types of information were drawn directly from writing about Manet aimed at novice or expert art learners respectively. Fragmented contextual information was crafted to reflect the shallow and fragmented nature of novice art understandings. This information lacked focus and cohesiveness. Integrated contextual Information, in contrast, concentrated on the concept of the active viewer, an aspect of Manet's painting frequently used to connect him to earlier artists and to establish his
position as a leader in the development of modern art (e.g. Hartt, 1985). The paragraphs were structured so that the same artists and descriptive details were mentioned in the same location in both types of information. Evidence of the influence of this contextual information can be consistently detected in the participants' lesson plans. Direct effects include replication of exact words, phrases, or general themes. In addition, indirect effects can also be detected in the participants selection of supporting artworks and a relative emphasis on some parts of the lesson above others.

**Direct effects fragmented Contextual Information.** A single sentence appears to have influenced two of the five lesson plans of teachers reading the fragmented contextual information:

> Primarily a painter of contemporary life, two subjects constantly appear in Manet's work: Paris and women. (Stevens, 1983)

**Alice,** a student teacher, focused her lesson around the idea of artists' representation of contemporary life. And, **Beth,** a beginning art education student, wrote she would introduce the key artwork to her students in the following way: "I [will] also point out the use of technique, the mirror, a woman in Paris, etc." Further examples of this effect will be reported in connection with the results of the lesson presentations.
Direct effects of integrated contextual information.

As previously stated, the integrated contextual information focused on the concept of the active viewer in Manet's painting. Four of five teachers reading this information directly mentioned this idea in their lesson plans. Valerie, a beginning art education student, referred to the active viewer three times in her lesson plan. Two of her seven objectives stated:

Students will discuss the four works of art and describe the differences in the placement of the characters, as well as how they feel they are involved in each.

The students will create a work of their own which involves at least one person. The work must either try to involve the viewer from the character(s) in the work by using the illusion of space."

In addition, Valerie explained how she would use A Bar at the Folies-Bergere in her lesson in the following way:

They will discuss the placement of the characters in the work with one another and the teacher. They will also discuss how they think the viewer is involved with this particular work. The students will also use this work to discuss the illusion of space and how it affects the placement of the characters and viewers.

Similarly, Kelly, an intermediate art education student enrolled in a clinical teaching experience wrote:

We will discuss how the viewer is involved...do you feel [you are] beside or behind the man ordering from the barmaid?"

Every aspect of Greg's (a student teacher) lesson was influenced by the contextual information. One of Greg's objectives noted that his "students [would] discuss how a
viewer of a painting can become a part of the painting."
Later, he wrote sample dialogue for his lesson as part of
his explanation of how he planned to use the key work of
art in his lesson:

Knowing that there is a mirror, you as the [viewer]
looking at the picture, do you get a sense of the
idea of being a part of the painting? -like you could
be in the ballroom?

Greg carried over this focus in his explanation of the way
he intended to use the supporting artworks and his
description of the studio activity. The concept of the
active viewer occurs in Suzanne's (an experienced teacher)
plan as well. One of her four lesson objectives stated:

Students will analyze "Folies-Bergere" to learn how
Manet was able to involve the viewer through his
composition, use of space, and mood.

The integrated contextual information probably cued
teachers to focus on the idea that the viewer becomes a
part of A Bar at the Folies-Bergere. It is interesting
that only Suzanne, an experienced teacher, explained how
Manet was able to accomplish this feeling in his painting.
Perhaps her art understanding and pedagogical experience
helped her access her prior knowledge and apply it to
developing this lesson. In contrast, the concept of the
active viewer is not included in any lesson plan of
teachers receiving fragmented contextual information.
Instead, their lessons are characterized by many different
references to art ideas, a feature of novice art understanding.

*Indirect evidence.* Subtle differences in lesson plans resulting from the type of contextual information teachers received can also be detected. A word-count analysis failed to turn up any patterns when examined for differences between length of teaching experience. When grouped by the type of contextual information they received, the participants' plans exhibited several interesting patterns.

On the whole, the participants who received integrated contextual information wrote more in the objectives section than the other group (except Alice, a student teacher reading fragmented information) (Table 5). Teachers reading integrated contextual information wrote more about *A Bar at the Folies-Bergere* than their intended use of the supporting works of art (Table 6). In contrast, teachers who received fragmented contextual information wrote more about their use of supporting artworks than how they planned to use the key artwork (except Pam, an experienced teacher, whose descriptions were relatively equal).

The number of supporting works of art teachers chose to include in their lessons varied by experimental group (Figure 4). Participants receiving fragmented contextual information elected to use more supporting artworks in
Table 5. Word-count comparison of objectives in lesson plans.

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Contextual Information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fragmented</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Beginning Art</td>
<td>Beth</td>
</tr>
<tr>
<td>Education Students</td>
<td>75</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Anne</td>
</tr>
<tr>
<td>Art Education</td>
<td>66</td>
</tr>
<tr>
<td>Students</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Student Teachers</td>
<td>David</td>
</tr>
<tr>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Alice</td>
</tr>
<tr>
<td></td>
<td>138</td>
</tr>
<tr>
<td>Experienced</td>
<td>Pam</td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>393</td>
</tr>
</tbody>
</table>
Table 6. Word-count comparison of the participants' use of key and supporting artworks in lesson plans.

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Contextual Information</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Fragmented</td>
<td>Integrated</td>
<td></td>
</tr>
<tr>
<td>Beginning Art Education Students</td>
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<td>K=91</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>S=112</td>
<td>S=39</td>
<td>S=151</td>
</tr>
<tr>
<td></td>
<td>Valerie</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate Art Education Students</td>
<td>Anne</td>
<td>K=27</td>
<td>K=110</td>
<td>K=231</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S=66</td>
<td>S=67</td>
<td>S=175</td>
</tr>
<tr>
<td></td>
<td>Laura</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kelly</td>
<td>K=94</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S=42</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>David</td>
<td>K=52</td>
<td>K=246</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>S=90</td>
<td>S=126</td>
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<td></td>
<td>Alice</td>
<td>K=77</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>S=93</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greg</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pam</td>
<td>K=98</td>
<td>K=111</td>
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</tr>
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<td></td>
<td></td>
<td>S=94</td>
<td>S=28</td>
<td>S=122</td>
</tr>
<tr>
<td></td>
<td>Suzanne</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>K=339</td>
<td>K=652</td>
<td>K=991</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S=455</td>
<td>S=302</td>
<td>S=757</td>
</tr>
</tbody>
</table>

K = use of key artwork
S = use of supporting artwork
<table>
<thead>
<tr>
<th>Fragmented Contextual Information</th>
<th>Integrated Contextual Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beth:</strong></td>
<td><strong>Valerie:</strong></td>
</tr>
<tr>
<td>Van Eyck, <strong>Arnolfini Wedding</strong></td>
<td>Warhol, <em>Shot Light Blue Marilyn</em></td>
</tr>
<tr>
<td>Ingres, <em>Comtesse d'Haussonville</em></td>
<td>Ingres, <em>Comtesse d'Haussonville</em></td>
</tr>
<tr>
<td>Manet, <em>Luncheon in the Studio</em></td>
<td>Grooms, <em>Room 222</em></td>
</tr>
<tr>
<td>Hanson, <em>Bite: The Kiteress</em></td>
<td></td>
</tr>
</tbody>
</table>

| **Anne:**                         | **Laura:**                       |
| Van Eyck, **Arnolfini Wedding**   | Van Eyck, **Arnolfini Wedding**   |
| Ingres, *Comtesse d'Haussonville*| Velazquez, *Las Meninas*          |
| Caillebotte, *In a Cafe*          |                                  |
| Velazquez, *Las Meninas*          |                                  |

| **David:**                        | **Kelly:**                       |
| Van Eyck, **Arnolfini Wedding**   | Manet, *Girl Serving Beer*       |
| Velazquez, *Las Meninas*          | Manet, *Luncheon in the Studio*  |
| Manet, *Study for Bar at the Folies-Bergere* | Manet, *Study for Bar at the Folies-Bergere* |

| **Alice:**                        | **Suzanne:**                     |
| Hanson, *Bite: The Kiteress*      | Ingres, *Comtesse d'Haussonville*|
| Renoir, *The Lute*                |                                  |

| **Pam:**                          |                                  |
| Manet, *Girl Serving Beer*        |                                  |
| Van Eyck, **Arnolfini Wedding**   |                                  |
| Degas, *Cafe-Concert at the Ambassadeurs* |                                  |
| Ingres, *Comtesse d'Haussonville*|                                  |
| Caillebotte, *In a Cafe*          |                                  |
| Grooms, *Room 222*               |                                  |
| Manet, *Luncheon in the Studio*   |                                  |
| Velazquez, *Las Meninas*          |                                  |
| Manet, *Study for Bar at the Folies-Bergere* |                                  |

Figure 4. Supporting artworks selected by participants.
their lessons than the other experimental group. Indeed, teachers reading fragmented contextual information selected an average of 4.4 supporting artworks (range = 2 to 9) compared to an average of only 2.5 artworks (range = 1 to 3) chosen by participants in the integrated Contextual Information.

Experimental groups differed in the selection of artworks as well (Figure 4). Four out of five teachers receiving fragmented contextual information chose to use paintings by Van Eyck and Velazquez in their lessons. Only one of five participants in the integrated contextual information group did the same. This result is interesting since these artists were mentioned equally in both types of contextual information.

Why did teachers reading fragmented information appear to focus more on the supporting artworks than on A Bar at the Folies-Bergere? Perhaps these teachers selected more supporting artworks to explain or reinforce smaller or more disparate parts of the key artwork because their own understanding was fragmented and superficial. On the other hand, participants receiving integrated contextual information were cued to focus on the concept of the active viewer. Concentrating their energies on including this idea in their lessons, teachers receiving integrated Contextual Information did not need to select as many supporting artworks.
**Summary**

Most lessons emphasized formal and/or descriptive aspects of art. However, specific lesson ideas varied considerably, even though the participants were limited to using Manet's painting of *A Bar at the Folies-Bergere* and a selection of 12 supporting artworks. Pedagogically experienced participants included interpretive meanings, relied less on formal and descriptive elements, and incorporated art historical information in their lessons. In addition, experienced teachers developed studio activities that closely resembled the key work of art in either interpretive, formal, and descriptive ways. Inexperienced teachers, in contrast, relied heavily on either formal or descriptive meanings and made vague connections to the key art work. Using works of art as visual examples, inexperienced teachers placed emphasis on the studio activity rather than on learning about Manet in their lessons. Although experienced teachers made more connections between types of meanings than less experienced participants, on the whole, ideas were listed discretely. Most lesson plans were characterized by unelaborated and ill-connected statements.

The contextual information participants received influenced the content of their lessons regardless of length of pedagogical experience. Teachers reading integrated Contextual Information incorporated the idea of
the active viewer in their lesson plans, wrote more objectives, and seemed to focus more on the key work of art than participants from the other experimental group. In contrast, participants receiving fragmented Contextual Information selected more supporting artworks and wrote more about how they intended to use the supporting works in their lessons.

Thus, contextual information and teaching experience seemed to influence the content and structure of lesson plans. An examination of presentations and subsequent interviews in later phases of this study reveals that teachers' art knowledge also affected the content and structure of lessons. These findings will be discussed below.

Phase Two: Lesson Presentation and Follow-Up Interview

Arrangements were made to observe the 10 participants' teach the lessons they previously planned in Phase One of this study. After their presentations, a follow-up interview was conducted to provide teachers with an opportunity to comment on their lessons. Inferring that real teaching situations may demand some alterations in lesson plans, teachers were encouraged to change their plans as needed to fit specific school environments. All teachers were asked to teach their lessons to classes of fourth or fifth grade students, but like real teaching situations no environment was exactly the same. Teaching
contexts will be described below before reporting the findings of this phase of the study.

**Teaching Contexts**

**Beginning art education students.** Valerie and Beth taught the lessons they planned to classes of fourth grade students in a rural elementary school located in a small town in central Ohio. There were approximately 25 students in each class and the students were primarily Caucasian. Although the students did not receive instruction from a trained art teacher, they were highly motivated to participate in the lesson due to the special nature of the art teacher's visit. I visited the school in advance to prepare the fourth graders for the visit explaining why the two art education students were going to teach them a lesson. Both lesson presentations were 60 minutes long and conducted in the regular classroom.

**Intermediate art education students.** Anne, Laura, and Kelly were enrolled in a clinical teaching course in the Department of Art Education at The Ohio State University and were nearing the end of their preservice art education training. The three participants taught the lessons they planned to mixed groups of fourth and fifth grade students as part of the department's Saturday Art Workshop for Children. Approximately 15 students were enrolled in each class. Although the students were predominantly Caucasian, each class contained a few
students of African-American and Asian descent. Choosing to spend their Saturdays in art classes, the students were highly motivated to learn about art. All participants in this group had taught at least three Saturdays before presenting their lessons on Manet. The lesson presentations lasted about 90 minutes.

**Student teachers.** David, Alice, and Greg taught students in more varied environments. David taught a class of fourth grade students in a predominantly Caucasian, suburban elementary school in an upper middle class neighborhood. Alice taught fifth graders in a racially mixed middle to lower middle class urban elementary school. Greg taught Caucasian, African-American, and Hispanic sixth graders in an urban inner city school. All students received regular art instruction from certified art teachers, and the lessons on Manet were observed after the student teachers had taught more than four weeks in the locations described above. Both David and Greg's lessons were 90 minutes long while Alice taught a 60 minute art lesson. Class size was similar, and all lessons were presented in art rooms in the Columbus, Ohio public schools.

**Experienced teachers.** Pam and Suzanne taught in a small public school district in Eau Claire, Wisconsin. Each teacher taught a 60 minute lesson to fifth grade classes in suburban elementary schools. Both lessons were
conducted in art rooms, and students were primarily Caucasian. Each class contained a small number of students of Asian descent. There were approximately 25 students in each class.

Although minor changes were made by some teachers in the selection of materials for the studio activity, no lessons were substantially altered in form or content from the original plans. Lesson presentations will be described and discussed below in terms of the participant's approaches to historical content, differences attributable to length of teaching experience, and contextual information effects.

**Carry-over of Ideas: Historical Information in Lessons**

Although most teachers wrote in their plans that they intended to talk about Manet, his painting, and his time, only experienced teachers actually included such historical information in their lesson presentations. While the teachers' depth of art knowledge probably influenced the type of information presented, it is interesting to note that both experienced teachers went into considerably more detail about Manet than did other less pedagogically experienced participants.

Anne, an intermediate art education student enrolled in a clinical teaching experience class, wrote that she would begin her lesson "by explaining some about Manet and
his artworks." Her lesson presentation, however, included only the following information about Manet:

We are going to talk about the one in the middle. It's called The Bar at the Folies-Bergere by Edouard Manet. Can someone describe it to me?

Anne focused her lesson on the descriptive aspects of the key work of art as she lead her students to discover mirror reflections. She gave no information about Manet, his painting, or other supporting artworks beyond the artists' names and titles of their works.

Valerie, a beginning art education student, introduced works of art in her lesson in a similar way:

Today, what we are going to be focusing on is this right here. I'll tell you the name of it. This right here is by Edouard Manet. I don't know if anyone has ever heard of him. This is called The Bar at the Folies-Bergere. And, this here is Comtesse d'Haussonville by Jean Dominique Ingres. This one here is called Shot Light Blue Marilyn, and it's by Andy Warhol. And, this one right here is called Room 227, and it was done by Red Grooms. Now this is Marilyn Monroe. Ever hear of her?

No additional information was given about the artworks or artists during Valerie's lesson as the students drew pictures with figures.

In contrast, David, a student teacher, included slightly more information about Manet and other supporting artists in his lesson than participants with less pedagogical experience. Like Valerie and Anne, he wrote that he intended to "introduce A Bar at the Folies-Bergere [and] give historical information about the artist and
[his] painting." While David was not specific in his written plan, he related Manet to a previous art lesson and included a time frame for his fourth grade students in his lesson presentation:

This is by an artist by the name of Edouard Manet. He's another French artist. We talked a little about Mary Cassatt going to France last week, but he was from France. He tried in his artwork to create space and he also used portions of symmetry.... Edouard Manet did this painting about 150 years ago.... He was influenced by other artists.

Later, David gave his fourth grade students simple factual information about the supporting artworks and related the year an artwork was created to something his students could understand:

There were other artists...that influenced how [Manet] painted. This is [one] painting. [It's] by another man by the name of Jan van Eyck.... This was painted about 600 years ago. We're talking back when Christopher Columbus was doing all his sailing...He signed this particular painting "Jan van Eyck was here" because he actually witnessed this wedding.

David then discussed the symmetrical and spatial qualities of The Arnolfini Wedding (Plate V) and implied these elements influenced Manet. He introduced Velazquez in a similar way linking Las Meninas (Plate VII) to The Bar at the Folies-Bergere (Plate I) through the terms symmetry and space. In comparison to participants with less teaching experience, David included more historical meanings and connected this information to his students' informal understandings. However, his treatment of art content is problematic since he oversimplified this
information to the point of inaccuracy. For example, Van Eyck painted *The Arnolfini Wedding* 58 years before Columbus sailed across the ocean, Manet's painting was created closer to 100 years ago, and *Las Meninas* is not particularly symmetrical. Although Manet never mentioned he was specifically influenced by Velázquez' use of symmetry and space, scholars have noted the spatial similarities between *Bar at the Folies-Bergere* and *Las Meninas* (e.g. Hartt, 1985). Thus, David's emphasis on symmetry is inappropriate within the context of the Manet's painting and the other supporting artworks used in his lesson. Interpretation of artworks is a necessary part of art instruction, but teachers can misinform or mislead students so that weak art understandings and/or misconceptions are developed. Once formed, these understandings can be difficult to change (Koroscik, 1990).

In contrast, the experienced teachers in this study presented a substantial amount of historical information about Manet and the supporting artworks in their lessons. Both Pam and Suzanne drew on their students' prior knowledge of art by linking Manet to previous lessons on Impressionism. Although they did not explain how Manet was different, they were careful to indicate that Manet was not considered to be an Impressionist painter but rather influenced the younger Impressionist artists.
Pam and Suzanne summarized the stylistic traits of Impressionism and contrasted the style to characteristics of traditional Academy painting. Pam reviewed the invention of the camera and implied that scientific inventions influenced art of the time. Suzanne stressed that Manet continued to seek the Academy's approval by entering the annual Salon exhibition but when rejected refused to exhibit with the Impressionists. Suzanne used a painting by Ingres to stress the difference between the art of the Academy and Manet's work. She presented historical information in a way fifth graders could understand while giving her students insight into how the art world functioned at the end of the 19th century. Unlike less experienced teachers, historical meanings were an important feature of both experienced teachers' lessons.

It is interesting that inexperienced teachers chose to include so little historical information in their lesson presentations despite the intentions stated in their lesson plans. It is possible that superficial knowledge of Manet, coupled with lack of teaching experience, led inexperienced teachers to limit the contextual meanings they included. Indeed, when interviewed after their lesson presentation, several inexperienced teachers disclosed they felt uncomfortable about their knowledge of Manet and, therefore, either
omitted information or focused on another aspect of Manet's painting. To illustrate, Anne, an intermediate level art education student, explained:

I wasn't comfortable. I mean, I've read some stuff, and I'm still not comfortable enough to give that information to the students. I wasn't ready to do that.

Greg, a student teacher, avoided presenting information about Manet for a similar reason:

I don't know anything about Manet...I knew I wouldn't be able to write a lesson dealing with the history of the artist...Just mentioning the artist...is fine. It gets them by.... If I knew more about Manet beforehand, I would have talked more about him. But, I didn't know too much about him, and I didn't want to research it.

In contrast, Pam, an experienced teacher, seemed to have compensated for her lack of knowledge about Manet, revealed during a subsequent interview, by spending time reading about the artist during the lesson plan writing activity. It is possible that her experience and confidence in lesson development and presentation allowed her to pursue new art knowledge. Less experienced teachers, on the other hand, used their time devising lesson activities rather than recalling information or learning about Manet.
Missed Opportunities to Deepen Art Understandings

Stein, Baxter, and Leinhardt (1990) used the term "missed opportunities" to explain how some teachers fail to stimulate learning. In their study, limited math knowledge caused an experienced elementary teacher to miss opportunities to deepen his students' understandings of math concepts. Like Stein, Baxter, and Leinhardt's investigation, teachers in this study also frequently missed chances to deepen understandings when they failed to elaborate on insightful student comments and questions.

Greg, a student teacher, missed repeated opportunities to move his discussion of A Bar at the Folies-Bergere from a lower-order explanation of subject matter to a more in-depth examination of the painting's interpretive qualities. In the beginning of his lesson, Greg's students surprised him by stating that the key artwork was similar in style to Impressionist artworks. Rather than reviewing or probing these characteristics, Greg assumed their understanding to be accurate when he asked, "so you all know what Impressionist painters are?" His students responded in the affirmative, and Greg returned to a discussion of subject matter. It is possible that his students held naive or inaccurate conceptions of Impressionism that remained unchallenged by his failure to determine what his students actually knew. In addition, Greg failed to distinguish between
Impressionist paintings and Manet's work, thus leading his students to believe that Manet was just another Impressionist painter.

Another instance of missed opportunity occurred when Greg asked his students to make up a title for the key artwork. His students responded with variations of The Bartender, The Waitress, and The Lady in the Bar. One student, however, said that it should be called The Depressed Bartender, a sensitive reading of the painting's interpretive qualities. Failing to take advantage of the student's insight, Greg responded, "You'd call it The Depressed Bartender, Corey? Alright. The name of it is The Bar at the Folies-Bergere." When several students asked what the Folies-Bergere was, Greg ignored the question and simply repeated the title of the work before moving on to the next question.

Valerie, a beginning art education student, also missed an opportunity to expand her lesson beyond the scope of a subject matter discussion. As she described the ambiguity of the barmaid's reflection, a student asked why they could not ask the artist what he had intended. Rather than contrasting Manet's intent with the interpretation of his artworks, or even telling her students that Manet was dead, Valerie responded with a garbled explanation indicating that viewers would still question the meaning of the work. By trying to give a
definitive answer, Valerie implied that Manet's intent was not relevant to the discussion. In a similar situation, Suzanne, an experienced teacher, told her students that Manet was not alive and, therefore, they may never really know what he intended. She left her students with the understanding that in art some issues are not clear and some questions may never be completely answered.

While it is evident that both Greg and Valerie lacked knowledge of Manet and his work, these missed opportunities might be the result of limited or inflexible lesson agendas, a characteristic of novice teachers (Leinhardt, 1986). Teachers with limited pedagogical experience or understandings may fail to recognize answers that deviate from the expected if they have no strategic plan for incorporating unanticipated information in their lesson.

Incomplete Explanations

Limited or inflexible lesson agendas may account for another difference between the participants' lesson presentations: incomplete or superficial explanations of the key lesson components. In addition to historical meanings, preservice teachers' lesson presentations were distinguished by an oversimplified handling of formal, interpretive, and descriptive aspects of art. Artworks were treated in a one-dimensional way with few links made to more than one type of meaning. Furthermore, lessons
appeared fragmented with few connections made between works of art and studio activities.

To illustrate, Valerie, a beginning art education student with no teaching experience, mentioned only artwork titles and artists' names before giving a garbled and oversimplified explanation of subject matter in the key and supporting artworks. Then, she explained the studio activity to her students in a total of seven sentences:

We're going to do the part now where you get to draw. What I want you to do is make a picture. It has to have at least one character in it. I want you to do it... either try [to] make it seem like you're not really a part of it. Like this one. Or, you could have it like this one... where it seems like we are a part of [it]. You guys understand what I mean?

Predictably, Valerie's students responded negatively and in unison. She repeated her explanation with little variation. When students still expressed confusion, she clarified her instructions:

You can draw what ever person you like. It's got to have at least one character in it... Does everybody understand? If you don't, I want you to ask me, and I'll try to explain it more to you.

With marginal carry over from the beginning of her lesson and little direction in the studio assignment, Valerie's students spent most of the lesson drawing whatever they wanted. While her own understanding seems to have been confused, she may have had difficulty explaining what she wanted her students to draw because she had no strategic
agenda for explaining or connecting the studio activity to Manet's painting.

Perhaps inexperienced teachers' lessons were found to contain limited or simplified explanations because they did not see the works of art as having alternative meanings or uses in lessons. This premise is supported by the novice teachers' responses to questions of how they developed their lesson ideas. David, the student teacher whose lesson concerned symmetry, reported that the idea just came to him as he stared at the image while writing his lesson. He looked no further for meanings or lesson ideas. During the follow-up interview he said:

Maybe color is the...thing that should have been emphasized but I didn't see that right off so I went with what I saw right in front of me...and took it from there.

Kelly, an intermediate art education student enrolled in a clinical teaching course, responded in a similar way. As she searched for a lesson theme, she reported:

I just looked over and I noticed that there were a lot of people casually sitting around and they were either drinking or they were eating, they always seemed to be in a type of restaurant.

Accordingly, Kelly planned and taught a lesson that related to dining experiences. Kelly and David, preservice teachers with limited pedagogical experience, decided on their lesson focus without drawing on their prior art knowledge to determine if their approaches were appropriate. In addition, they failed to consider if
other ways of approaching Manet and *A Bar at the Folies-Bergere* were more likely to promote rich art understandings in their students. When teaching, few other aspects of the key and supporting artworks were introduced, leaving students with the impression that alternative meanings did not exist.

**Influence of Contextual Information on Presentations**

Ideas, phrases, and words from the contextual information teachers read before planning their lessons were present in their lesson presentations. Containing shallow and misleading pieces of information about Manet, the fragmented contextual information was structured to resemble novice art understandings. The integrated contextual information, in contrast, was drawn from writing aimed at individuals with an expert understanding of art (Appendix C).

**Fragmented Contextual Information.** During their lesson presentations, three participants with varying amounts of teaching experience paraphrased the statement, "two subjects constantly appear in Manet's work, Paris and women" (Stevens, 1983), from the fragmented contextual information. Pam, an experienced teacher, told her students that Manet's "favorite subject matters were Paris, France and women." David's (a student teacher) explanation of subject matter was similar. Although his
lesson focused on formal elements, he gave the following explanation of Manet's subject matter:

He liked doing regular scenes from Paris and from France. He liked to go into places like restaurants and things and just do a painting. He'd do a painting of a woman or something like that. Just basic things.

Beth, a beginning art education student, introduced *A Bar at the Folies-Bergere* in a way that reflected the influence of the contextual information as well:

This is by Manet. He's a French Impressionist. I don't know if you know a lot about art. I don't have a lot of time to go into details like that, but he painted a lot of women. This is in France. And, this is a bar, *A Bar at the Folies-Bergere*. If you notice, there's one woman. He always used mirrors.

Lack of knowledge about Manet may have influenced the participants to rely on contextual information. A few weeks later, during a subsequent interview (Phase 3), Beth again referred to the contextual information:

I don't remember a whole lot about him, specifically, but I remember he worked with mirrors and women in France.

Clearly an effect of the experimental condition, teachers' emphasis on mirrors and women in Paris reflects a shallow understanding of art and a failure to either learn about or access prior knowledge of Manet gained in college art history courses.

Integrated contextual information. The integrated contextual information, drawn from writing aimed at art experts, led teachers to believe that Manet's painting
ideally illustrates the concept of the viewer's active involvement in works of art through the use of mirror reflection. Manet's manipulation of space was contrasted to the Renaissance conception of the picture plane as a window into space. Jan Van Eyck and Diego Velazquez were mentioned as precursors of this new depiction of space in art. Finally, the effect of the mirror in Manet's painting was contrasted to Ingres' use of mirror reflection in his painting, *La Comtesse d'Haussonville* (Plate VI). All lesson presentations in this group were affected to some degree by the contextual information teachers received. Four instances of this influence are presented below.

Laura, an intermediate art education student, mentioned the idea of a spatial shift in Manet's paintings. She introduced Manet and her supporting artworks in the following way:

I'll give you a little explanation and you can come up and take a close look at them. [This one] is by an artist named Edouard Manet. And, this one is by an artist named Velazquez. [Manet] is a French artist. This is a Spanish artist. And this is by a Dutch artist named Jan van Eyck. Now, usually throughout history [when artists] have painted paintings they have tried to create the illusion of space. It goes back into space. So, you have a three dimensional picture by using things like perspective and making things in the background look smaller. It's almost a shadow box effect or a stage....These three artists (pointing to Manet, Velazquez, and Van Eyck) have managed to include a whole different section of space than is normally included in a painting. Can you think of anything that is similar about these three works?
When her students recognized that all three images included people and mirrors, Laura reviewed key elements of the discussion:

They are all from a different time but they all have those things in common. [There are] people. They've all got a mirror, and they include space from outside the picture.

Three teachers included references to the active viewer in Manet's painting. Greg, a student teacher, used this idea in all parts of his lesson. His explanation of *A Bar at the Folies-Bergere* focused on mirror reflections. After asking his students where the people reflected in the mirror could actually be, Greg summed up student comments in the following way:

These people are actually over here? So, you get a sense that maybe you could be a part of this picture?

Although he failed to adequately describe the how the artist was able to give the illusion that the viewer was actively involved in the painting, Greg carried over this emphasis in his studio activity as students concentrated on mirror reflections.

Suzanne, an experienced teacher with a deep knowledge of art (revealed by subsequent interviews and lesson content), also showed influence of the experimental condition. During her discussion of the key artwork, she asked her students:

How many people feel as the viewer that you are part of the painting? -that you are involved in the painting? Why not take a vote? Compare it to this one
(Ingres' painting). In which painting are you more involved as the viewer?

Valerie, a beginning art education student, was substantially influenced by the Contextual Information. Her studio activity and explanation of Manet's painting reflect this influence. In the following passage, Valerie's explanation is garbled, but the effect of the contextual information is clear:

The focus of this lesson is going to be on how you, as the viewer...when we look at these pictures here... it's going to be about how you feel that....where we are when we look at these...

The integrated contextual information appeared to influence participants to some degree, regardless of teaching experience or art knowledge.

Summary

Although teaching contexts varied, some differences in lesson presentations can be attributed to the participants' depth of art knowledge and pedagogical experience. The contextual information teachers' received prior to lesson planning influenced the content of their presentations as well. Interestingly, teachers did not substantially alter their original plans to fit actual teaching environments. Instead, they made minor modifications in materials or studio activities.

The presentations of preservice teachers were characterized by a superficial use of historical meanings. In fact, inexperienced teachers frequently gave little
more than artist names and titles of artworks in their lessons. Experienced teachers, in contrast, included a substantial amount of information about Manet and his time in their lessons. Both experienced teachers contrasted Manet's painting to the Impressionist style, recalled the annual Salon exhibitions Manet entered seeking official approval for his work, and drew on students' prior knowledge of art. Follow-up interviews revealed that the inexperienced teachers' lack of knowledge about Manet caused them to omit information in their lessons. However, lack of knowledge alone cannot account for this absence since one experienced teacher also revealed she knew little about Manet. Yet, she managed to include a substantial amount of historical information in her lesson.

Inexperienced teachers frequently overlooked opportunities to deepen student understandings of key ideas when they failed to elaborate on insightful student comments or questions. Experienced teachers, on the other hand, rarely missed opportunities to expand student understandings of art. They smoothly incorporated unexpected comments or questions so the presentations contained richer art meanings than their original lesson plans. Limited or inflexible lesson agendas, coupled with shallow art knowledge may account for these missed opportunities. It is possible that some teachers were
unable to include unexpected comments because they lacked a strategy for incorporating them in their lesson.

Limited lesson agendas may account for preservice teachers' superficial approaches to content. Indeed, follow-up interviews revealed that inexperienced teachers decided on a lesson focus without determining if other ideas were more appropriate or more likely to lead to significant student learning. Without pedagogical knowledge, they may have considered only a limited range of lesson options before quickly deciding on a focus. This characteristic is similar to novice approaches to complex problems in other domains (Glaser, 1985).

Contextual information influenced lesson presentations to some degree in ways that appear to relate to the teacher's experience and art knowledge. Some clues to understanding teachers' decision-making can be found in their responses in the follow-up interview.

Phase Three: Content Knowledge Interview

After writing and teaching their lesson about *A Bar at the Folies-Bergere*, the participants were interviewed to assess the depth of their knowledge about Manet and teaching. Using the key and supporting artworks as a starting point, the participants grouped and explained relationships they saw between images. The discussion focused on what they knew about Impressionism and modern art and Manet's place within each genre. The participants
also distinguished between simple and complex ideas about Manet and his work. Connecting their art understandings to teaching, the participants told how they normally construct art lessons and how they used what they know to teach art. Despite the relatively small sample size, some responses can be attributed to the length of teaching experience and the contextual information the participants read at the beginning of the study. The interview responses are further discussed below.

**Art Knowledge**

Grouping images and seeing relationships. The participants were first asked to place color copies of the 12 supporting artworks into groups that made sense in relation to the key work of art. They explained how the images were grouped. Since artworks can often be classified and understood in more than one way, the participants were then asked to regroup and describe the new categories. Depth of art understanding could be inferred by the categories the teachers established and the degree to which they applied prior art knowledge when discussing the artwork's meanings.

Teachers most frequently grouped images according to the subject matter or descriptive meanings contained in the artworks. Children, gatherings, portraits, and mirrors were categories often developed by participants. Three teachers, Beth (a beginning art education student),
Valerie (a beginning art education student), and Alice (a student teacher) devised groups based on the number of figures in each image during one of the sorting tasks.

Grouping images according to subject matter alone may indicate lack of art knowledge. Laura, an intermediate art education student, explained that she could not place Hanson's sculpture, Rita: The Waitress (Plate XIII), with other artworks since she knew little about the artist and work:

I'm not familiar with this piece at all, so I can't lump it with anything. I can't categorize it. I don't know anything about it. I mean, [the] subject matter ... is like a waitress or a cafeteria employee who looks kind of bedraggled. I'm not familiar with the artist or anything about the work. All I can do is describe the subject matter.

Two participants considered formal meanings as they formed groups of artworks. Beth, a beginning art education student, described light source as the reason she grouped Degas' Cafe-Concert at the Ambassadeurs (Plate VIII) with Andy Warhol's Shot Light Blue Marilyn (Plate XI). She explained that these two images did not fit with the other artworks in the following way:

The thing I see in my head now is light source. They [have] a different source of light. (Referring to the Degas painting) I mean, the foreground doesn't have a lot of light... in the theatre part, and then up on the stage there must be light showing just up to the bottom portion. Not on their faces....(Referring to Warhol's artwork) And this one has a different light source coming directly on. Everything is lighted. There doesn't seem to be much shadow at all, except for under the chin. That's kind of an odd-ball picture compared to the rest of
them, although it is a face and there are faces involved in each of these.

Anne, an intermediate art education student, also referred to formal meanings when she grouped two of Manet's paintings, *Girl Serving Beer* and *Luncheon in the Studio* (Plates II and III), with Degas' *Cafe-Concert at the Ambassadeurs* (Plate VIII). She explained she was "looking at the colors" and how the people were positioned. Although different in composition, Anne reported that "they still used dark colors". Beth and Anne included the similar references to formal qualities in their lesson presentations.

All teachers except Beth and Valerie (beginning art education students) made simple historical comparisons when sorting images into groups. Teaching experience appeared to influence how much emphasis the participants placed on historical meanings when grouping artworks. Indeed, student teachers and experienced teachers assigned images to groups with explanations that focused on historical comparisons more frequently than less experienced teachers. This emphasis was also exhibited in other phases of this study where teachers with more pedagogical experience included more historical information in lessons.

Only Suzanne (an experienced teacher) included interpretive meanings in her explanation of how she
grouped images. This emphasis can also be found in Suzanne's lesson plan and presentation.

Several teachers gave inaccurate explanations when describing how they grouped images. To illustrate, Laura, an intermediate art education student, developed a group that included three paintings by Manet (Girl Serving Beer, Luncheon in the Studio, and Study for the Bar at the Folies-Bergere)(Plates II, III, and IV), Degas' painting, Cafe-Concert at the Ambassadeurs (Plate VIII), Renoir's work, The Loge (Plate X), and Caillebotte's painting, In the Cafe (Plate IX). She classified the images in this group as Impressionist works for the following reasons:

I'd say those are all Impressionist [paintings]. They're mostly all scenes, I mean they all have figures in them. And, they're mostly indoors. There are [none] outdoors.

Contrary to Laura's explanation, Impressionist artworks are generally characterized by exterior rather than interior scenes (Stangos, 1985).

Understanding Manet. Depth of knowledge about Manet can be detected in the participants' contextual explanations of the artist and his work. Manet admired the Spanish painter Velazquez, and this regard can be seen in Manet's manipulation of the spatial plane and use of opaque paint, particularly the color black, in his artworks (Gronberg, 1988). Interestingly, it is these qualities that scholars often mention when relating Manet
to modern art (e.g. Canaday, 1964). Although Manet's work is often included in novice art appreciation books about Impressionism, scholars, in contrast, contend that many characteristics separate Manet's paintings from Impressionist works (e.g. Hanson, 1983; Moffett, 1983). Distinguishing between Manet's work, Impressionism, and modern art is, therefore, an important point in deciphering the depth of the participants' knowledge of late 19th century art and Manet's painting.

Participants were told that some people think of Manet as an Impressionist painter and others say that he was not an Impressionist. They were then asked what they thought.

Four of the five teachers receiving fragmented contextual information mentioned brushstrokes in connection with Manet and Impressionism. Alice, a student teacher, responded that Manet was not an Impressionist:

He had some similarities with the Impressionists, but... the strokes of the brush don't seem as loose as the Impressionists.

In contrast, Pam, an experienced teacher, cited his "brushstrokes and the light, a lot of reflected light...[and] casual settings" to explain why she considered Manet to be an Impressionist. Beth, a beginning art education student, also agreed:

I think he was an Impressionist because his style [was] similar to theirs'. They were exploring new grounds and new brushstrokes.
Anne, an intermediate art education student, also referred to brushstrokes while revealing a shallow understanding of Impressionism:

I've been drilled that [Bar at the Folies-Bergere] is an Impressionist painting. [But] when I think of an Impressionist painting, it is really hard to see unless you're really far back. You have all those little brushstrokes and stuff. That's what I think Impressionism is. [But] that is one of the qualities he doesn't have. But then, like in this background, it's not very clear. It just has those dots and stuff, but you can tell they're people.

While several teachers receiving integrated contextual information referred to paint application when discussing Manet and Impressionism, none mentioned brushstrokes explicitly. Kelly, an intermediate art education student, saw Manet as a transitional figure:

I don't think he was [an Impressionist]. I think he was a definite influence. [But] when I think of Impressionism I think of it all being [done in] dabs of paint and not very realistic. Whereas he uses both. I see him as a transition between periods.

Suzanne, an experienced teacher, made a distinction between Manet and Impressionism by drawing on her prior art knowledge:

I've always read that he was a precursor to Impressionism. Since that is what I've read, that is what I believe. First, of all, I don't think he's an Impressionist because he didn't consider himself an Impressionist. So that has a lot to do with it...From looking at [his] paintings, even though I read somewhere that light was real important to him, he doesn't seem to have the scientific approach to it that some of the Impressionists did, and for that reason he doesn't seem to be quite [an Impressionist].
Greg, a student teacher, attributed an Impressionistic style to Manet. However, Greg's explanation was contradictory and garbled:

I don't know too much about him. Yes, I think he [has] the Impressionist painting style. But, my understanding of Impressionism is painting [in] natural light, and his paintings weren't dealing with any kind of natural light. It was indoor lighting. That's my only recollection of the thing that I would find controversial about him being an Impressionist. But, I find, his works to be Impressionist works...because of the painting style....His [paint] application is a little bit different [from Monet or others] but it's still Impressionism.

Perhaps the confusion apparent in Greg's response accounts, in part, for the opportunities he missed to probe his students' understandings of Impressionism during his lesson presentation.

Valerie, a beginning art education student, revealed a superficial understanding of Manet and Impressionism in her explanation as well:

I guess I think he is, just because that is always how I've studied him [in art history classes].

When asked what qualities made Manet an Impressionist, Valerie was unable to respond with information beyond words in the question:

Because he paints things as they would just be happening, like the impression...the first impression of something.

Despite further probing, Valerie could not explain what Impressionism was or how Manet's paintings revealed impressions of scenes. Similarly, Valerie was unable to
articulate whether or not Manet should be considered a modern artist:

Well, I'm not sure what I would define modern art as. I guess the subject matter he chose, things from everyday life. Actual things that happened...I'm not really sure about it.

Anne, an intermediate art education student, also had difficulty connecting Manet to modern art:

I have a hard time thinking about [it]. I'm trying to think of the ways things progressed during that time. I think, I don't know if it's true or not. I can't explain why I don't agree.

Later, Anne, defined modern art as "the stuff I see today. Maybe very, very contemporary. The 1960s is pushing it. 1970s and 1980s."

David, a student teacher, equated modern art with creating something new and controversial, and therefore did not think that Manet should be considered a Modern artist. In contrast, Pam, an experienced teacher, explained that Manet was "the first one to take a work of art and not have it look so much like a photograph...where you can actually see the brushstrokes". Pam believed this characteristic to be an attribute of modern art.

Laura, an intermediate art education student, and Suzanne, an experienced teacher, described Manet and modern art in similar ways. Laura believed Manet was one of the first modern artists "for a number of reasons, including spatial techniques, innovations of space, and the snapshot effect." Recalling her previous art history
classes, Suzanne, differentiated Manet's approach to space from earlier conceptions of space to conclude that Manet's departure from realism places him within modern art.

While beliefs about Manet's place within Impressionism and modern art varied, it is interesting that few participants were able to adequately articulate the characteristics of either genre. Most participants held naive and underdifferentiated conceptions of Impressionism and modern art, perhaps explaining why so few lesson presentations included historical information.

**Distinguishing between simple and complex ideas.** Ten statements each were taken from novice and expert literature about Manet and placed on cards (Appendix I). The statements varied in structure and ranged in complexity from basic descriptions of formal qualities to intricate combinations of meanings. Several statements referred to other artists or styles to assess how well teachers were able to place Manet in historical context. The statements were randomly ordered and the participants were asked to read and discard any cards that did not match their understanding of Manet and his work. They then placed the remaining cards in a continuum from statements with simple ideas to statements containing complex concepts. The teachers discussed why some statements were untrue and some concepts were more complex than others.
No patterns were found in the teachers' selections of matching or non-matching statements that could be attributed to either length of pedagogical experience or type of contextual information. Instead, placement and explanations appear to reflect participants' depth of art knowledge (Appendix J).

Factual statements of formal or descriptive qualities were frequently placed at the simple end of a continuum by the participants. For example, Alice, a student teacher, reasoned that a statement describing Manet's method of applying paint to canvas contained a simple idea:

It's just a description of how the paint is put on the canvas. I mean, there's no interpretation or fancy words...That is a pretty objective thing to say. I mean, everyone is going to agree with [the] statement.

Suzanne, an experienced teacher, responded in a similar way to the same statement:

This is what you see on the canvas. You see that paint is stroked on, also it smears, runs together. You see other places where it is dabbed on.

In contrast, Valerie and Beth, both beginning art education students, explained they placed statements in simple positions because the sentences contained easy words or phrases:

It's a simple statement. It's easy to understand. It's not complex wording. You can look at the phrase and look up and say, "Oh, yeah, I understand that". (Beth)
[I placed it here] just because [it has] all simple words and it's a short sentence and it's to the point. (Valerie)

Teachers frequently placed statements that contained interpretive qualities or combinations of meanings at the opposite end of the continuum. Several participants explained:

A lot of times you talk about subject matter and style separate, but when you start talking about them together...I think that is really complex. It goes really into the artist and [his] mind and why he chose this [or that] color...I just thought putting everything about history, the artist, styles, everything [together is difficult]. (Anne, an intermediate art education student)

I think it is more complex because we're looking at composition, subject matter, formal aspects, and now we're getting into the interpretation. (Kelly, an intermediate art education student)

Comparing teacher explanations of a single statement illustrates variations in art understanding. Half of the teachers disagreed with the following statement:

Manet's painting seems spontaneous. He did not pose the figures in this picture, but painted them as he found them.

In fact, most of Manet's paintings were studio constructions. In A Bar at the Folies-Bergere, Manet used a barmaid from the Folies-Bergere, Suzon, as a model for the work which was painted in his studio (Cachin, Moffet, & Barea, 1983). His working processes have been well documented. Although the painting may seem unplanned, it was carefully planned.
Greg, a student teacher, revealed a shallow understanding of Manet when he agreed with the statement:

It wasn't painted in the studio, it was in the bar. He just went there and painted what he saw...He just painted it and it doesn't look very realistic but it is reality and what he saw...It was spontaneous. I don't think he posed any of the figures except for the barmaid who is right in the center.

Greg equated Manet's lack of realistic style with spontaneity and confused the place that is depicted with the location it was constructed.

David, a student teacher, appeared to be influenced by the fragmented contextual information he received as well as by a shallow art knowledge when he concluded:

I know for a fact, he did a lot of everyday subject matter in France...some of it might have been spontaneous, but I think that he saw so much of it, painted so much of it, that he could see something and make it look like a pose. I think he was trying [to do that] a lot.

While David and Greg failed to use any prior knowledge when judging the truth of the statement, Laura and Kelly remembered that one of the supporting artworks was a study for A Bar at the Folies-Bergere. They connected this knowledge with the statement to conclude that the painting was planned:

No, it's definitely planned. I mean, we know that because he did a study of it before. (Laura)

I know from the examples you have shown me [that] he has done studies. That is not spontaneous [if] he has done studies. He thought this out very carefully. (Kelly)
Alice, a student teacher recalled other prior knowledge to conclude that the painting was not spontaneous:

I read that he was very old at the time and was in bed and he actually set it up in the studio, so that [statement] I know for sure is false.

Suzanne, an experienced teacher, contrasted Manet's working methods with the effect of the painting on the viewer:

I think Manet had this woman pose for him in the studio, but then he painted it in a situation that looks more like a snap-shot, more like something that isn't posed.

Suzanne, Alice, Laura, and Anne used prior knowledge and/or distinguished what is depicted from how the artist worked. These participants revealed a better understanding of Manet and his work than teachers who responded to only subject matter or failed to connect previous learning to current problems. The effects of this shallow knowledge will be explored later when I combine explanations to show how understandings affected selection of art content and lesson presentations.

**Pedagogical Decision-Making**

The participants were asked how they usually develop ideas and construct art lessons. Their responses reflect varying degrees of understanding about teaching processes and curriculum. Valerie, a beginning art teacher, was not
sure how to develop lesson ideas:

That is one of my big problems, I [can] never get ideas to plan lessons. I just don't know what would be appropriate. Well, I guess I would gear [the lessons] towards what the students enjoy and what they want to learn about...what excites them.

In contrast, three preservice teachers indicated they develop lesson ideas from studio activities or works of art that suggest studio activities. Beth, a beginning art education student, gets ideas from visuals and develops a studio activity. Greg (a student teacher) devises a studio activity to closely resemble an artist's work he likes or some visual materials he has. David, a student teacher, considers his studio activity, but he also thinks of what he wants his students to learn:

I think about the objectives first...I think about what I want them to understand as far as a studio activity and also how I can get some sort of historical content or some additional idea that they'll learn...I think generally, as a whole. [For example] if they never learn how to use a watercolor set correctly on watercolor paper, what will they remember about watercolor leaving this room that might pop into their head when they leave the classroom...It all goes back to the general picture. [They're] not all going to be artists and art does not always just exist in the classroom.

After thinking a moment, David clarified his explanation:

I have a big picture and then I also have, of course, a studio activity, because I want them to learn how to do several different kinds of techniques. So, there's the studio activity, then there's the big picture, and then the objectives.

Kelly, an intermediate art education student, also starts out with a key idea she calls a theme:
Basically, [I] start out with a theme. As far as ideas for themes, well, there's a lot you have to put into consideration... the age group, what you think would be interesting to them, exciting to them. [I] also think about different things [I] like and enjoy that they would enjoy also.

Anne, an intermediate art education student, gets ideas from a variety of sources:

- Brainstorming with other people.
- Books.
- Things that I have done in my own classes. Not just in college, but what I can remember in middle school and elementary school. I just try to come up with new ideas.

Alice, a student teacher, also relies on books to develop lessons:

- I [find] a lot of stuff just from going to the library and looking through books. I'd see something I like, and that would give me more ideas. So, basically a good way is to look through art books. I usually try to get some background information about it. That might mean I have to get some more books. Basically, that's what I would have to do...get background information on other works of art that might relate to [my lesson idea].

Although considering age and ability of students, many teachers in this study reported that they devise lessons from their own knowledge of art and personal preferences. Many go to other sources for information about works of art or draw on past experiences to form activities. No participants indicated they use art education texts to assist in sequencing curricula. Instead, most teachers relied on translating their art and pedagogical understandings to provide lesson content.
Pedagogical Content Knowledge

The term "pedagogical content knowledge" has been coined to describe how teachers transform subject matter understanding with knowledge of teaching when presenting lessons (Shulman, 1987). Resting on the complex interplay between knowledge of subject, students, pedagogy, and environment, teachers translate what they know into content appropriate for teaching in specific situations. Research in related areas indicates that teaching expertise is tied, in part, to the teacher's pedagogical content knowledge (Grossman, Wilson, & Shulman, 1989; Leinhardt, 1986). In this study, teachers were asked to describe how they use what they know about art to teach children. Variations in responses revealed differences due to the teacher's depth of art and pedagogical knowledge.

One participant, Alice, a student teacher, explained that teaching was an intuitive process where knowledge combined with experience:

*It seems to me that a lot [of] teaching is intuitive. That you do stuff without really thinking about it. It's just something you have. I think most of the people, in art education are going to take a lot of the same classes, but I think each person learns everything a little bit differently just because we're different people. So, it's probably a combination of intuition, the facts or whatever you learned in class, and then how you take all that information in. I think that kind of combined together is how you teach.*
Other teachers revealed that they broke art content into small bits of information when they developed lessons. They viewed art teaching as a process of knowledge simplification rather than a process of knowledge translation. To illustrate, David, a student teacher, explained how he approaches art history in lessons:

I cut it up into a package, giving them just pertinent information that will help them when they go into the studio activity...Those are the type of things I do, give them little bits of pieces of information.

Valerie, a beginning art education student with a shallow understanding of art, knew she must consider her students' level of understanding, but she developed art content through a process of simplification as well:

I just use things that I [have] learned about. You know, placement of characters and things like that. [But I] make it so they understand it. Make it simpler.

Greg, a student teacher, considered his students when developing lessons, but did not modify art content to specific teaching situations:

Basically,...I use what I know. I don't think I'd have anyone understanding what I'm teaching if I always taught it the same way... So, I usually use the resources I already know. But, [that] doesn't eliminate going out and learning new things, because I do...I won't stop because I don't know anything about it. I will go and research the stuff, get an idea of what it [involves].

Greg's description contradicts an earlier explanation where he revealed he knew little about Manet and did not
see the need to learn more before presenting his lesson. With a shallow knowledge of art and limited pedagogical experience, it is likely that Greg does not deepen his art knowledge as needed. Indeed, his lesson presentation confirms this supposition.

Teaching experience did not seem to influence the teachers' pedagogical content knowledge since Pam's (an experienced teacher) explanation was similar to less experienced participants:

I guess I think about it in steps from the simplest to the most complex, as far as teaching techniques. So, we start out with contour line drawing. And, maybe by fifth grade we start doing some modeling and shading.

When using works of art, Pam emphasized what she looked for in images:

Finding good examples to show the children what we are talking about [is important]. When we talk about leaves and trees, good examples of leaves, really good details [are needed]. Or, in first grade we do outlining techniques and so we use artists who use big black lines like Matisse.

Only Suzanne, an experienced teacher with deep art knowledge, articulated that she translated her art understandings to lesson content by considering pedagogical factors and strategies. Kelly, an intermediate art education student, was also aware of the need to select and modify art content for students:

You [must] think about what [aspects] of the work [of art] is going to be valuable towards your theme. Because, if you just strictly go in with your Gardner (an art history text commonly used in college survey
courses) and start quoting, they [will] be lost. They [won't] get a whole lot out of it.

Anne, an intermediate art education student, recognized that art content must be adapted to the students' level of understandings but indicated lesson development relied on selecting the right material:

I'm very picky about what reproductions I choose. I just don't choose any old works. You can't show nudes and stuff. You have to be sensitive to that. You don't teach the kids everything you learn. You pick on something that will be relevant to your lesson.

Teachers varied in their explanations of how they used what they knew to develop and present lessons. While one teacher relied on intuition to combine prior knowledge with appropriate lesson content, most teachers explained that they simplified art knowledge into small bits of information when teaching. Several teachers, however, indicated they translated what they knew to lesson content after determining the art concepts they wished students to learn. No differences in responses can be attributed to length of teaching experience, since experienced and inexperienced teachers answered in similar ways. Understanding of pedagogical content knowledge, may therefore, rely on other factors.

Summary

Teachers' responses in the Content Knowledge Interview reveal that many possessed a shallow knowledge of Manet and his work. Frequently, the teachers failed to
apply prior art knowledge when solving problems or answering questions. When grouping images, the participants often used simple descriptive categories to distinguish works of art, not readily connecting meanings or combining interpretation with descriptions of subject matter and formal elements. Yet, when discussing statements about Manet, teachers indicated that interpretation is a more complex aspect of understanding artworks.

Corresponding to findings in other phases of this study, teachers with more pedagogical experience placed more emphasis on historical meanings when they grouped images and or discussed lesson development. However, if historical understanding was lacking, teachers were apt to draw on other knowledge, prior experiences, or books to develop lesson ideas. Many participants failed to distinguish between their own understanding of art and content appropriate to teaching art. The outcomes of art and pedagogical knowledge will be further illustrated below.

PART TWO

Combining Phases:

A Comparison of Novice and Expert Teaching

By comparing an inexperienced and experienced teacher's responses and actions across all three phases of this study, it is possible to develop a picture of how two
teachers differ as they think about, plan, and teach art. Representing opposite ends of an art teaching-understanding continuum, Suzanne and Beth approach, explain, and teach art in ways similar to experts and novices in other studies of expertise. After placing both teachers in context, I will explore the understandings these individuals hold about art and compare how they usually develop lessons and organize their knowledge for teaching. I will then examine how these understandings interact with teaching experience to influence the content of the lesson they taught about Manet's painting *A Bar at the Folies-Bergere*.

**Background and Experience**

It is essential to understand the conditions and contexts of teaching and learning before comparisons can be made in the teachers' solutions to particular teaching problems. They both strive to teach art well, however, Suzanne has years of practice and Beth is just learning what art teaching involves.

*Beth: A novice art teacher.* Although it is early in her training, Beth shows promise that she will some day become a capable art teacher. At the time of data collection, Beth was enrolled in a beginning level undergraduate art education methods course, one of a series of courses required for art teacher certification at The Ohio State University in Columbus. The course
focused on curriculum design, and data were collected within the first two weeks of the term before students had concrete experience in lesson planning.

Prior to her participation in this study, Beth's teaching experience was limited to a few lessons taught during a previous art education field observation class. Nevertheless, Beth appeared confident and articulate when discussing art or teaching. She showed leadership qualities and initiative in her relations with her peers.

She had taken six studio courses and three art history survey courses that covered Western art from the stone age to the present. Although she expressed concern over the depth of her art knowledge, Beth fulfilled most of her department's requirements in art history, criticism, aesthetics, and studio production. A comparison of Beth's art and education background with available data indicates that her art history and studio training is typical of most art educators (Sevigny, 1987).

Suzanne: An expert art teacher. In contrast to Beth, Suzanne's experience, knowledge, skill, and approaches to art teaching identifies her as an expert art teacher. Suzanne has taught elementary art for ten years. Over the course of her teaching career, Suzanne has taught in urban, suburban, and rural settings, instructing both affluent and impoverished students in kindergarten through sixth grade. Seven years ago she became the second
elementary art teacher hired in the Eau Claire Public Schools, Wisconsin, and has since assumed a leadership position in art education in the area. In addition to her teaching, Suzanne serves as supervisor of other elementary art teachers in the district. She co-authored the curriculum used by all elementary art teachers in the district's schools. She has chaired the annual Youth Art Month Exhibition in the area for several years. Furthermore, she represents art teachers in meetings with the superintendent of schools and regularly makes district-wide art and curriculum presentations to classroom teachers.

Suzanne's art and art education training is both broad and deep. She has an undergraduate double major in painting and art education from a large midwestern university. She studied art history in Austria and earned a master's degree in art education from The University of Illinois, Champaign-Urbana. A comparison of her background with other available data (Sevigny, 1987) reveals Suzanne has more studio and art history training than average novice art educators.

**Art Knowledge**

An examination of responses to questions and problems in the third phase of this study reveals that Beth and Suzanne have strikingly different understandings of art and teaching. They sorted and classified images,
explained contextual information, and distinguished accurate from inaccurate ideas about Manet in ways that resemble expert and novice approaches to subject matter in other fields (Glaser & Chi, 1988). Suzanne exhibited an expert's problem-solving abilities as she applied her prior art knowledge to understanding Manet. In contrast, Beth showed evidence of shallow, compartmentalized knowledge and under-differentiated art concepts (Koroscik, 1990). She answered questions from content contained in problem statements while Suzanne transferred relevant prior knowledge to the problem situation. The depth of art and pedagogical understandings held by these participants will be further discussed below.

Seeing relationships among images. Participants were asked to sort small reproductions of the 12 supporting artworks into groups that made sense to them. They then explained and related the groups they formed to teaching about Manet. Beth and Suzanne's methods and explanations revealed substantial differences in approaches to content in teaching.

Beth placed supporting artworks in groups according to simple formal qualities (light source) and the subject matter in each image (number of figures). She included no interpretive, historical, or contextual references thus failing to construct deeper connections between artworks or to draw any conclusions about meaning.
Suzanne, in contrast, sorted images by historical context, forming groups of paintings by Manet, works of the same time, earlier works, and contemporary artworks. Her manner of distinguishing interpretive qualities in the cluster of 20th century artworks is typical of the way she described other groups:

[The Hanson sculpture] reflects the kind of mood that I found in the Folies-Bergere. A kind of desolate, introspective kind of mood. Whereas, [in the other works] the figures are both looking out towards the viewer and [they don't] have quite the same depressing feeling.

Suzanne typically related types of meanings when discussing works of art. When sorting images for the second time, Suzanne linked historical ideas and information with subject matter to form new groups. She formed a new cluster of images with the following explanation:

These would be a group that I would [use to] talk to students about the different ways that artists have portrayed women in the arts. We would compare, not only subject matter and the woman being the center of interest, but also what the artist is trying to tell us about the status of women.

In contrast, Beth's discussion contained no links to other types of art meanings or issues. Her explanations were limited to superficial representations of the elements and principals of design and subject matter in works of art.

Understanding Manet. Just as she grouped and explained relationships between images, Beth also distinguished modern art and Impressionism from other art
movements by subject matter representations and formal qualities. She defined modern art as:

Getting out of the old master style of all specific detailed paintings in fanciful lifestyles. Maybe, modern meaning relating more to us and our world. Different brushstrokes...exploring new ground.

Perhaps for this reason, Beth classified Manet as one of the first modern artists:

He's depicting life as it is, not life as it should be. He's involving you within the painting, not just you viewing the painting. Ordinary people in ordinary life, not all the upper class people. He focused right there on the middle class.

Oversimplifying, Beth also failed to differentiate use of brushstrokes from the intent of Impressionist artists when she connected Manet to Impressionism:

I think he was an Impressionist because his style [was] similar to theirs. They were exploring new grounds, and new brushstrokes.

Although often included with other Impressionist artists in coffee-table books, scholars rarely designate Manet as an Impressionist (Cachin, 1983).

In contrast, when asked to discuss Manet's relationship to modern art, Suzanne explained:

I think it means he's one of the first artists perhaps to think more about the picture plane than what was being represented and that's kind of important in modern art. I remember...studying about that when we studied The Fifer in terms of the...flat picture plane. That's one of the biggest areas I remember about Manet. His departure from realism.

Suzanne displays a more sophisticated understanding of Manet's position in the history of art by relating
contextual information to general art concepts. Without prompting, she recalled information about another Manet painting and applied relevant aspects of the work to the current discussion.

**Distinguishing between accurate and inaccurate ideas.** All study participants were asked to distinguish accurate from inaccurate statements about Manet and *A Bar at the Folies-Bergere*. Responses to the statement, "A single figure like an icon dominates the whole painted surface", reflect the depth of the teachers' art knowledge as well. While both Beth and Suzanne agreed that the statement did not match what they understood to be true about the key artwork, their explanations were similar to responses in previous portions of this study. Using no prior knowledge of art to evaluate the statement, Beth ignored the word *icon*. She emphasized the subject matter depicted in *A Bar at the Folies-Bergere* to arrive at her conclusion:

*That can't be right, because he focuses on the mirror and the background and everything else around him and the figures [are not] even half of it.*

Suzanne, on the other hand, discounted the representation of the barmaid as an icon for the following reason:

*She's an integral part and she is definitely what I teach the kids the center of interest is... but, an icon...See, what we understand about her is very much reflected in the rest of the painting, whereas an icon, you wouldn't need other stuff to understand it.*

Consistently, Suzanne exhibits characteristics associated with experts in other fields: deep domain knowledge that
appears organized in chunks of accessible and transferable facts, concepts, and principles. Beth, on the other hand, answers questions and solves problems from information given in the problem statement, rarely going beyond a superficial explanation of formal elements and subject matter.

Crafting regular lesson plans. Differences can also be seen in the way Beth and Suzanne describe how they usually construct lessons. While Suzanne indicated that she organizes lesson content around broad art concepts, Beth explained that she develops ideas from studio projects. First, Beth gets ideas from "things [she] sees other people do, questions children might ask, things [she] might have read about". After the general idea is formed, Beth described what she does next:

[I] think of something they could create...I'd try it myself to see if it worked, and then while I was doing that I'd probably come up with more ideas about [working with media], and then from that I would think about what to focus the lesson on.

On the other hand, Suzanne's lessons evolve from concepts over a period of time:

Once I have the concept that I know I need to teach about, whether it's the idea of how American Indians use symbol in their art or whether it's an introduction to Impressionism ... I spend a lot of time thinking about it...I let [the idea] mull over in by brain for a long time. And, what I find is that [the idea] develops. I'm sure that after a certain number of years' experience, I can allow myself to let my lesson plan form over a number of days.
It is evident that in mulling over ideas, Suzanne draws on her knowledge of art and teaching. Nevertheless, she seeks additional information from other sources:

I go to a lot of resources. I talk to a lot of other art teachers. Fortunately, [I work with] five other art teachers. We have a lot of exchange of ideas and I find that very helpful. I [also] look at what I've taught before, what worked and what didn't work, and I try to change it.

Suzanne plans the studio activity only after her ideas and content are refined:

It's not like I go to a recipe book. I try to plan the activity so that it will get towards the concept I'm trying to teach.

These teachers construct lessons in ways that can be attributed to differences in experience and knowledge base. Although both start with ideas, Suzanne draws on a conceptual framework where teaching experience interacts with art knowledge. Beth's ideas lack this organizing structure. Instead, Beth gets an idea from something she sees, makes an example, and then generates a lesson focus. In contrast, a studio activity is the last piece of the lesson Suzanne constructs as she sorts through her own ideas and seeks additional information.
Pedagogical Content Knowledge

Differences in experience and the organization of content knowledge cause Beth and Suzanne to have varying conceptions of how they use what they know about art to teach. Beth explains teaching content as a series of simple steps:

You have to start with your basic, simple things and maybe even describe line, because a lot of them don't know that line has two sides. A line is a continuous dot in motion. You have to start with other basics and depending on their level, if they've already had some of that information, start them out with a simple form of drawing and get more complex. Give a [different example] for each level.

Although Beth distinguishes between her own understanding of art and the understanding her students hold, she seems unaware that knowledge must be translated for student learning:

I wouldn't tell them right what I read from a book, because I already have all that knowledge that they don't have...They wouldn't understand things right away.

In contrast, Suzanne demonstrates a sophisticated understanding of a teacher's need to translate art knowledge to content appropriate for student learning:

It's really important that you put things in such a way that kids can understand and that involves using appropriate vocabulary but it also involves making it interesting to them. I mean, if I went in and said we were going to draw a still life and if I approached it the same way that my college instructors approached [it] with us...the kids would find it horribly, horribly boring. So, you have to make it important to them. You have to make it something that they want to learn about. Let's face it, a lot of college classes can be dry. But also,
in college, I understood the need for practice, whereas elementary students are not going to understand nor are they going to develop these same skills. So, you have to approach it in a whole different way. I want them to know that through their art they can learn to be better observers of their world. I want them to learn that through art...they also learn about other artists...[and] learn to express themselves.

Variations in teaching experience and the organization and depth of art knowledge affected Beth and Suzanne's explanations of how they organize art content for teaching. These differences are also apparent in the ways they categorized images, talked about art history, responded to art ideas, and explained how they regularly develop lessons. Their lesson presentations illustrate the actual effect of these differences.

Lesson Presentation Comparison

Suzanne and Beth's lessons, similar in length and organization, were presented to students in comparable environments. Both lessons were 60 minutes long. Suzanne's students were fifth graders while Beth taught a class fourth grade students. Beth's students lived in a rural setting while Suzanne's students could be classified as small town rural/suburban. Students in both classes were primarily Caucasian, however Suzanne's class contained several students of Native American and North Vietnamese descent. Class size was similar.

Both lessons had a similar structure. Each lesson began with an introduction to art content including a
discussion of art reproductions. The teachers then led into an explanation and motivation for the studio portion of the lesson. The students were given time to work on their products and the lesson ended with a brief review. Despite similar structure, the lessons were dramatically different in the depth of art content presented.

A novice lesson presentation about Manet. Like other inexperienced teachers in this study, Beth used the key and supporting artworks as visual examples as she focused on light source and subject matter. She emphasized the studio activity from the opening of her lesson. In fact, she began her lesson:

How many of you like to draw? How many of you like coloring with crayons? Good. It will work out then. Now that you've got a little bit of an idea of what we're going to do today, drawing and coloring, okay, behind me are a bunch of artworks.

Keeping historical details to a minimum, Beth's presentation showed influences of the fragmented contextual information she read before she planned her lesson. The following represents all the information she told her students about the key artwork:

The main artwork here...is by Manet. He's a French Impressionist. I don't know if you know a lot about art. I don't have a lot of time to go into detail like that, but he painted a lot of women. This is in France, and this is a bar, The Bar at the Folies-Bergere. If you notice, there's one woman. He always used mirrors. This is kind of complicated for you, so I'm going to leave out the mirror section here.
Beth's characterization of Manet as an artist that painted mirrors and women in France (highlighted portions above) clearly relates to the Contextual Information she read before she planned her lesson. Furthermore, not only did Beth misinform her students about Manet's relationship to Impressionism, she failed to explain what Impressionism was. More than oversimplified, her depiction of Manet's paintings borders on misinformation as well. Mirrors are not a typical aspect of Manet's imagery. Her explanation is rushed, and she implies that her students cannot understand mirror reflections, a relatively simple concept. Lacking experience, Beth has a novice understanding of her student's knowledge, interests, and abilities.

Beth discussed no interpretive meanings in her lesson, instead she focused on light source and techniques for improving blank backgrounds. Her presentation of a supporting artwork illustrates this point:

This is The Waitress by Duane Hanson. He does figures where he takes molds of people's bodies. If you actually saw this in a museum, you wouldn't know if it was not real...You would think there was a lady standing there. After a while you would notice that she's not moving. She's not real, but she looks very real....Well, the background now. If you'll look , this background is real plain. What can you do to make the background look interesting? What can you add to it?

By implying the plain background behind the Hanson sculpture is something the students need to alter or
improve, Beth displays a fundamental misunderstanding of the meaning of the work and the intent of the artist.

Limited knowledge of art and students may have also caused Beth to miss an opportunity to deepen her students understanding of the key artwork when she failed to take advantage of a student response early in the lesson. She asked the students to describe common features in Manet's *A Bar at the Folies-Bergere* and the supporting artworks. Looking for a single answer, Beth ignored the first student response that all the paintings looked like they were from the 19th century. Instead, she waited until students responded with the preferred much simpler answers: they all have girls in them; they are paintings. Then, she restated a response and oriented students to the studio activity again:

> We have two major important points here: they are all about people. The lesson I'm going to have you do today is...you're going to have to focus on one person.

The understanding of art Beth presents in her lesson is the same understanding expressed in her explanations of Manet, modern art, and Impressionism during the Content Knowledge Interview (Phase Three). Her focus on formal qualities and subject matter is similar to the way she grouped and explained artworks during the same interview. Her knowledge of art is naive, shallow, and compartmentalized. She does not apply prior learning from
art history courses to current art teaching problems. Instead, she thinks about artworks in terms of formal and descriptive meanings, and she does not connect these understandings to interpretive meanings or historical information.

An expert lesson presentation about Manet. In contrast, Suzanne's lesson incorporated historical information and broad concepts to teach students about Manet and A Bar at the Folies-Bergere. Throughout the lesson, formal, descriptive, and contextual knowledge was linked with interpretive elements to form the focus of her lesson. Probing the students' prior knowledge of art, Suzanne began her lesson by reviewing a previous lesson on Edward Hopper. She connected Hopper to Manet:

[Hopper's] painting reflects his life and his times. And, in a way, today, the artist that we're going to talk about...his paintings do the same thing.

Drawing partially on the student's existing art knowledge, Suzanne's presentation included a surprising amount of contextual information about Manet and the supporting artist, Ingres. After a discussion in which students pointed out similarities and differences between the key work of art and La Comtesse d'Haussonville, Suzanne told her students:

I will tell you that they are painted by different artists. This was painted by an artist whose name is Ingres (writes name on board) and he painted in the mid-1800s. So that's about a 100 years before Edward Hopper. So you can kind of get an idea...and he
lived in France. This particular artist whose name is Edouard Manet (writes name on board) also lived in France. They probably lived at the same time. However, [Ingres] is an older man. Edouard Manet painted that particular painting in 1881. So, about 40 years after this one (pointing to Ingres' painting). Do you remember...think back to fourth grade for just a minute...We talked a little bit about Paris, France in the late 1800s and about a style of art that was popular in Paris at that time.

After a review of Impressionism, including style characteristics, artists, and the annual Salon exhibition, Suzanne continued with her description of Manet:

Like I said, Manet also lived in Paris. He painted just around the time of the Impressionists. In fact, he became friends with Claude Monet. He knew them. And, the Impressionists liked Manet's style and I'm sure they got many of their ideas from him...Manet also wanted to get into the Salon, and he was a little bit more successful than the Impressionist painters. Even though his art was very different from art that the Academy and the Salon might traditionally favor. Then, however, he painted some paintings that were quite different, not this one, but some others, and the Salon rejected him for a while. He didn't get his paintings in. At that time, the Impressionists kind of said, "Hey, why don't you show with us?" And, he said "No". So, he didn't totally latch onto the Impressionists, and then toward the end of his life, this painting... was accepted into the Salon. By the end of his life he had a lot of people who liked his work, but it was very different from work that was done before.

It is interesting to note that while Suzanne took time to discuss contextual information in depth, Beth told her students that she didn't have "a lot of time to go into detail."

Suzanne's lesson presentation is characterized by an emphasis on interpretive meanings. She skillfully led students from a discussion of the historical significance
of the artist to a conversation about the mood and meaning
of *A Bar at the Folies-Bergere*. She linked the painting's
interpretive qualities to the students' own experiences:

Somebody mentioned earlier that it seemed like she
was almost in a trance. How many of you would agree
with that? (students respond) How many of you have
ever been in a situation where there's a lot going on
around you, yet you seem to be not even aware of
what's going on? Or you seem to kind of be out of it?
(pause) Is that what's going on here? You noticed
that she seemed very lonely, that was the comment
that you made, yet look at all the people here. Can
you feel alone in a crowd? Can you feel lonely in a
crowd? Tell me about some situations when that might
happen.

For several minutes, Suzanne prompted students to explain
similar situations they had encountered or where they
believed they could experience the same feeling. Her
studio activity reinforced this focus as the students drew
themselves in a picture with the same compositional and
interpretive qualities as the key artwork.

Suzanne used both her understanding of art and
teaching as she presented her lesson. In contrast to
Beth, Suzanne's knowledge and experience allowed her
students to develop a contextual understanding of Manet
and relate aspects of the key artwork to their own
knowledge and experiences.

**Summary**

By combining and considering responses from all
phases of this study, it is possible to develop a picture
of how an individual's understanding of art and teaching effect the content of art lessons.

Beth emphasized simple, descriptive and formal qualities when she discussed Manet and as she sorted images in groups during the Content Knowledge Interview (Phase 3). Beth responded with underdifferentiated, superficial interpretations gleaned from problem statements and rarely used prior historical knowledge in her explanations. When Beth taught, she concentrated on these same aspects of art. For Beth, art teaching focuses on studio projects which are explored in terms of subject matter and the elements and principles of design. In the interview, she expressed that art content should be simplified for student understanding since fourth graders do not possess the same sophisticated art knowledge she does. Her lesson plan and presentation also reflected this belief.

Suzanne, in contrast, carried over her emphasis on concepts, interpretive qualities, and historical information in her lesson presentation. Her knowledge and experience allowed her to recall, organize, and use what she knew about Manet in a pedagogically effective way. She drew on her students' prior knowledge of art, and she related earlier lessons to the current lesson. In addition, Suzanne managed to combine descriptive, formal, historical, and interpretive aspects of the key artwork so
her students would understand the painting in a multifaceted way. Suzanne's studio activity reinforced these points. From student responses during the opening part of her lesson, it is evident that Suzanne's students remembered key art ideas and information for long periods of time.

Despite differences between Beth and Suzanne's lessons, it must be emphasized that by many standards Beth taught a very successful art lesson. She used works of art to illustrate her focus, reinforced learning, and made sure her students were actively engaged during the entire lesson. Although she had little experience and did not know her students, she related art content to students' prior knowledge on a simple level. It is likely that Beth's pedagogical skills will strengthen with practice. Possibly, she will learn to spend time discussing art and connecting ideas to studio projects. She may learn that content must be translated rather than simplified for use in art teaching. By most standards, Beth will probably become a good art teacher. Without deep art and pedagogical understandings, it is improbable that Beth will become an expert teacher. Although Beth's understanding of Manet was influenced by the contextual information she read before planning her lesson, no findings suggest that it helped her to deepen her knowledge and relate ideas in her lesson presentation.
CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

This study examined how teachers' knowledge of artists and artworks, teaching experience, and contextual information influenced planning and instruction. Results indicate that some variations in lessons can be attributed to differences the depth and organization of the teachers' art and pedagogical knowledge. Furthermore, the structure of contextual information appears to have critically affected some of the participants' thinking, planning, and teaching. Although generalizations are not possible due to a small sample size of 10 participants in this study, some observations can be made about how individuals with different degrees of pedagogical experience use what they know to teach art to elementary students.

Observations and Conclusions

Participants in this study developed a broad range of lesson ideas despite restricting them to use only a single key work of art and several supporting artworks. The diversity of their lesson ideas supports the notion that well selected images can be used successfully in a
number of alternative ways. Using a limited number of related artworks while exploring overlapping ideas can help teachers develop curricula that stresses the complex and versatile nature of art.

This research also revealed that connections between lesson components or types of meanings were neither easy nor readily made by preservice teachers. Despite using works of art, inexperienced teachers actually included little in their lessons that would deepen their students' understandings of art. The preservice teachers in this study simplified art content and frequently missed opportunities to deepen their students' understanding of particular works of art. Although most inexperienced teachers indicated they had studied Manet, his work, and time period in art history courses, they were unable to access what they learned and apply this knowledge in teaching situations.

Experienced teachers, in contrast, developed lessons that were rich in detail and explanation. Their lessons included layers of meaning so that multifaceted understandings of art could be formed by students. Experienced teachers rarely missed opportunities to deepen their students' art understandings. Instead, they smoothly incorporated unexpected comments or questions so that their presentations contained richer art meanings than their original lesson plans.
It is clear that art knowledge played a key role in how the participants structured their lessons, used works of art, and presented content to students. Participants with little teaching experience and shallow knowledge of art, developed lessons in which artworks were treated as visual examples of desired studio products. These same teachers used content in narrow and superficial ways, limiting their presentations to either descriptive or formal meanings and omitting all mention of the artworks' interpretive qualities. Often, historical information was confined to artists' name and titles of artworks. Even when they recognized that their knowledge was lacking, inexperienced teachers failed to research either Manet or the key work of art. Instead they quickly decided on a lesson focus without determining if their approach was appropriate or likely to lead to significant student learning.

Shallow art knowledge alone, however, cannot account for all differences between the teachers' lessons in this study. Interviews revealed that Pam, an experienced teacher, also knew little about Manet and late 19th century French art. Yet, she was able to acquire knowledge necessary to present a lesson rich in historical meanings.

It appears that knowledge of learners, learning, and teaching influenced the selection of content and the
approaches taken to lessons as well. The experienced teachers in this study not only had a clear picture of what to teach but they also knew how to teach it. In contrast, the preservice teachers had difficulty connecting art meanings to teaching strategies.

Contextual information seemed to have had a substantial impact on teacher understandings and lesson content. Words, phrases, and ideas from both types of information, respectively, occurred in participants' plans, lessons, and interview responses. Also, some participants remembered elements from the contextual information for a relatively long period of time. Six months after reading the single page of fragmented contextual information, Beth (a beginning art education student) and I were seated at the same table during an end of the term dinner. Beth referred to Manet's depiction of "women in Paris, France and mirrors" while describing her participation in this study to fellow art education students.

Although the contextual information influenced the teachers' understanding of Manet, it did not, however, help teachers to prepare lessons that connected types of meanings nor did it lead to higher-order lesson content. Merely organizing contextual information around a key concept failed to help teachers develop more expert understandings or present lessons that contained more
depth. Furthermore, it does not appear that pedagogical strategies varied as a result of the contextual information teachers received. It is possible that without explicitly joining teaching strategies to specific higher-order ideas, teachers could not use the integrated contextual information in a way that approximated an expert's approach to art.

No teachers in this study indicated they went to art education textbooks to develop lesson ideas or solve teaching problems. The teachers were more likely to either rely on earlier art education experiences or go to art history texts for information about artists and works of art. This is problematic since these texts neither help teachers develop successful instructional strategies nor connect studio processes to art meanings.

It would be easy to see many of these cases merely as examples of poor art teaching. However, by most current standards, the teachers in this study taught fairly successful art lessons. They used works of art to illustrate the focus of their lessons, reinforced art learning, and made sure their students were actively engaged during the whole class period. Most teachers related lesson content to their students' prior knowledge and interests while maintaining adequate classroom control. Yet, when the lessons were examined for the presentation of art content, striking deficiencies were
evident. The relationship between art teacher knowledge and experience and practice should be further examined.

Future research might investigate some of the following questions: How specific is domain knowledge in art teaching? Does art teaching expertise vary with depth of content knowledge? Will an experienced and knowledgeable art teacher use novice teaching strategies when teaching unfamiliar art content? How does an expert teacher learn new art content? Do experts apply different learning strategies than novices? What factors will facilitate flexible lesson agendas in novice teachers? Is some art content better than others in helping teachers to make connections between meanings when presenting lessons? Will these connections be more likely to occur if art content is organized around key ideas and tied to teaching strategies? What range of acceptable lesson ideas will be developed around a single work of art by knowledgeable and experienced teachers? Understanding the answers to these questions would help art educators prepare teachers who will move successfully toward expertise in art teaching.

Future Research

In order to further examine how pedagogical strategies interact with depth of art knowledge, I have planned a study to investigate how an expert art teacher approaches familiar and unfamiliar content in lessons. Bruce Adams, an experienced and knowledgeable high school
art teacher in Buffalo, New York, has agreed to participate in the study. Bruce is known as an exceptional teacher through his professional activities, art knowledge, and dedication. He is recognized as leader in art education in Western New York as well. Recently, he was the program chair for the 1991 annual meeting of the New York State Art Teachers Association in Monticello. He serves on the board of Hallways, a contemporary art center known in New York for innovative exhibitions and programs. In addition, Bruce regularly teaches graduate and undergraduate courses that focus on art and art teaching.

Concerned for future art teachers and interested in understanding and improving his own teaching, Bruce has agreed to teach what he considers to be his most successful, content rich unit to a class of his students. Then through interviews and other interactive tasks we will determine where Bruce's art knowledge is shallow. He has agreed to develop and teach a unit of lessons on this topic to the same class. Will Bruce's pedagogical knowledge and experience allow him to teach unfamiliar art content expertly? Or will he approach unfamiliar content with instructional strategies that resemble novice approaches to teaching? Bruce and I plan to begin work on this study in January 1993.
REFERENCES


Canaday, J. (1983). We must be of our time and work with what we see. *Smithsonian*, 14 (6), 90-101.


Kowalchuk, E. A. (1990). Understanding research in art education within a model for teaching. Unpublished manuscript, The Ohio State University, Department of Art Education, Columbus, OH.


APPENDIX A

PROTOCOL FOR PHASE ONE: LESSON PLANNING DIRECTIONS

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PROTOCOL FOR PHASE ONE: LESSON PLANNING DIRECTIONS

SAY: I'd like to thank you for participating in my dissertation research and today's lesson plan writing activity. Your responses today will provide insights into how art teachers plan lessons.

SAY: Since other individuals will be participating in this lesson plan writing activity on different dates, it's important for each group to get the same instructions. Therefore, I am going to read from a script as I describe today's activity. If you have a question about a particular part of the lesson, I can repeat that part of the instructions if needed. I have also included a copy of the essential portions of the instructions in the folders I will shortly pass-out to you.

SAY: I am offering you the opportunity to attend a free jewelry workshop. If you wish to participate in this workshop please sign-up for a date and time on this chart before you leave today (point).

SAY: I'm now passing out folders to you that contain part of the materials you will use today. Please do not open the folders until I ask you to do so.

SAY: Attached to the outside of the folder is a consent form for participation in this research. It's a standard form used by individuals conducting research in the social and behavioral sciences at The Ohio State University and it basically indicates that your participation in this study is voluntary. There are two copies of this form attached to the folder.

SAY: Please read the form now.

SAY: Does anyone have any questions?

SAY: Would you please sign the top copy of the form now? Would you have a person sitting at your table sign the form at the bottom as a witness?

SAY: When you have finished, pass the signed form forward. You may keep the other copy of the form.

SAY: Thank you.
SAY: I'm going to discuss the items in your folders now. I will hold up an example of each item as I describe it. Please wait to open your folders until I ask you to do so.

There are three items in the folders.

The lesson plan form has a yellow cover.

The folder also contains two questionnaires.

The questionnaire with the pink cover asks you some very brief questions about your knowledge of Manet. And, the questionnaire with the green cover asks you some questions about your background and teaching practices.

As with all portions of this study, your answers are confidential. There are NO RIGHT OR WRONG ANSWERS.

SAY: As I explained earlier, the purpose of today's activity is to see how art teachers plan lessons and use particular works of art in their teaching.

SAY: I would like you to develop and write a lesson plan that uses Manet's "Bar at the Folies Bergere" along with a studio activity.

SAY: Your lesson should be aimed at a class of upper elementary aged students (grades 4 or 5).

SAY: Since I may ask you later to teach the lesson you plan today, your lesson should be similar in structure to lessons you normally plan. However, if possible, please follow the basic lesson plan format provided since similar formats will help me compare your lesson plan with others.

I realize that in real teaching situations you may not actually write lesson plans in as much detail and depth as I am asking you to here. But, as I said, this lesson plan is meant to give me an idea of how you use works of art in teaching and it is important that I get an accurate picture of how you think about works of art and studio activities in lessons.

If you are asked to participate in the remaining portions of this study, I will probably get in touch with you early in February and will ask to observe you sometime during the month.
SAY: I've put some blank notebook paper on each table if you need scrap paper or extra writing space. If you do use any extra paper, please place it in your folder when you are finished. Even scrap paper will help me to better understand how you plan lessons.

SAY: In developing your lesson plan you will of course, draw on your own knowledge of art and teaching, but you may also refer to any material on this table as well (point). These notebooks contain copies of articles about Manet and the painting. The books include textbooks, encyclopedias, and other works on Manet that you may normally refer to when developing new lessons.

SAY: If you do use any ideas or information from any of the material on this table, I'd like you to indicate it in your lesson plan. I have a system that I hope will make this process easy. I've put letters on the outside of each book and notebook. In the notebooks, I've re-numbered the pages in the upper right corner of each page (show). If you draw a particular idea from anything on the table just indicate where you got it by letter and page number in parentheses.

SAY: Please open your folder now and remove the packet with the yellow cover.

Write your name in the blank on the first page.

SAY: The two following yellow pages summarize the instructions and provide some basic information about the work of art.

SAY: Does anyone have any questions so far?

(pause for questions)

SAY: Now I'd like you to look over the lesson plan form. The first page includes space for a lesson title, the length of time it will take to present this lesson, and room to list works of art that support and reinforce your lesson.

Please select your supporting artworks from these brown notebooks. There's a good variety of images in these notebooks, and you can take them out of the notebook and spread them out if you wish.
The second page of the lesson plan provides space for you to write lesson objectives. Write as many as you need for your lesson.

I have provided space on the third page for you to list the materials you will need to carry out the lesson.

Following the list of materials I have provided pages for you to describe how you plan to introduce the artwork to your students, how you intend to use the supporting artworks, and what the studio portion of the lesson includes.

The final page in the lesson plan form asks you to describe the strategy you will use to determine if your students learned what you intended.

SAY: Does anyone have any questions?

(pause for questions)

SAY: My preliminary study indicates that two hours provides ample time for you to complete this activity. I will let you know when you have 30 minutes left to write.

It is important that you not discuss what you are planning with anyone else at your table.

Before you begin planning, please read over the yellow pages.

SAY: After you are finished with the lesson plan please proceed to the packet with the pink cover. You may begin. Thank you!!
APPENDIX B

SAMPLE HUMAN SUBJECTS RELEASE FORM
SAMPLE HUMAN SUBJECTS RELEASE FORM

THE OHIO STATE UNIVERSITY

CONSENT FOR PARTICIPATION IN
SOCIAL AND BEHAVIORAL RESEARCH

I consent to participating in (or my child's participation in) research entitled:

The Effects of Art Knowledge, Pedagogical Experience, and Contextual Information on Art Teaching

Elizabeth Kowalchuk ___________________ or his/her authorized representative has
(Principal Investigator) explained the purpose of the study, the procedures to be followed, and the expected duration of my (my child's) participation. Possible benefits of the study have been described as have alternative procedures, if such procedures are applicable and available.

I acknowledge that I have had the opportunity to obtain additional information regarding the study and that any questions I have raised have been answered to my full satisfaction. Further, I understand that I am (my child is) free to withdraw consent at any time and to discontinue participation in the study without prejudice to me (my child).

Finally, I acknowledge that I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: ______________________ Signed: ______________________ (Participant)

Signed: ______________________ Signed: ______________________
(Principal Investigator or his/ her Authorized Representative) (Person Authorized to Consent for Participant - If Required)

Witness: ______________________

HS-027 (Rev. 3/87) — (To be used only in connection with social and behavioral research)
Manet is regarded as a pivotal figure in the history of art and a vital influence on the painters in his own day (Shone, 1978). In his lucid and charming surfaces (Shone, 1978) one can see a complicated synthesis of past and present that anticipated so much of what was to come later in art (Ruskin, 1968; Stevens, 1983, p. 87). "His paintings ask questions that reverberate" (Stevens, 1983, p. 84). Manet shared many ideas with Impressionist artists such as Monet and Degas, and many people consider him to be an influential figure in the development of Impressionism (Children's Britannica, 1989; Faison, 1954; Hillyer & Huey, 1966; Ruskin, 1968; Brommer & Horn, 1985).

Trained as a traditional painter, "Manet traveled throughout Europe and was particularly attracted to the paintings and brushwork of Diego Velazquez and Francisco Goya of Spain" (Brommer, 1988, p. 364).

Primarily a painter of contemporary life, two subjects constantly appear in Manet's work: Paris and women (Stevens, 1983, p. 85). Both of these subject are included in his final masterpiece, "The Bar in the Folies-Bergere", completed two years before his death and shown in the Salon of 1882. The painting is a "masterpiece of perfect of balance and strict composition; dark colors in the background are brightened by light colors in the foreground: white circles of light, the skin-tone of the girl tending bar and the shimmering chandeliers, all blending in a delightful harmony of colors" (Ruskin, 1968, p. 16). The woman stands behind a marble bar in front of a large mirror that reflects the busy activity of a music hall. The mirror reflection gives the illusion of deep space within a shallow area (Stevens, 1983, p. 87). "Everything and everyone meets at the surface of the canvas, poised as if in question. Perspective is disrupted" (Stevens, 1983, p. 85). We realize from the man's reflection in the mirror at the right, that he is standing as we are when we look at the scene; "his image draws us into the composition of the painting" (Ruskin, 1968, p. 16).

Although the mirror has been used in other works of art, notably van Eyck, Velazquez, and Ingres, Manet's use

* For easier reading, references were removed from the Contextual Information given to participants.
of the mirror creates a space that is uniquely ambiguous. Manet "seems to be both a traditionalist and a remarkable innovator; a compound of romantic and realist capable of working in a variety of styles; a revolutionary from within the Parisian bourgeoisie hankering after official recognition" (Shone, 1978, no pg). "Living in a century when science had demonstrated that no one man can begin to know the universe, Manet was not interested in trying to say: 'Here is an instant in a day, to be accepted for what it is, without too much concern over its place in the vast, incomprehensible scheme of things'" (Canaday, 1980, p. 81).

Integrated Contextual Information

Many artists and scholars acknowledge the importance of Manet's work to the development of modern art. These individuals generally focus on Manet's use of modern subject matter, his method of paint application, and his use of space to distinguish him as one of the great painters. While no doubt all of these factors contribute to his prominent position in the history of art, it is his involvement of the viewer in the work of art that is most unique. Manet's painting entitled "The Bar in the Folies-Bergere" ideally illustrates this point.

Spatially, "The Bar in the Folies-Bergere" is the most complex image created up to his time in the history of art (Hartt, 1985). At first glance the work seems rather straight-forward. A woman stands behind a marble bar "laden with fruit, flowers, and bottles of champagne and liqueurs" (Hartt, 1985, p. 847). She looks out at the viewer with an "absent, weary and dispirited" expression (Cachin, Moffett, & Bareau, 1983, p. 479). Closer inspection reveals that she actually stands before a large mirror that reflects the excitement and activity of a large music hall. "Since the nearer edge of the bar is cut off by the frame, we have the illusion that its surface extends into our space, and that we as spectators are ordering a drink from the stolid barmaid" (Hartt, 1985, p. 847). "This illusion is reinforced by the reflection in the mirror, which fills the entire background of the picture. We can clearly make out a back view of the barmaid, in conversation with a top-hatted gentleman" who must be also the spectator (Hartt, 1985, p. 847). Thus, "it is as though the canvas itself (is) but a reflection of our world, and only the barmaid stands between the painting and ourselves" (Cachin, Moffett, & Bareau, 1983, p. 481). As spectators we then take an active part in the
painting, and "it may well have been Manet's intention to make the picture seem an extension of (our) world" as well (Hanson, 1979, p. 204).

By actively involving the viewer in the painting, Manet has eliminated the last vestiges of the Renaissance conception of pictorial space which saw the viewer as passive and the canvas as a window into space (Hartt, 1985). It should be recognized the mirror alone is not responsible for this new conception of the viewer as active participant, rather the mirror is a useful device that adds complexity to the painting. Other artists such as van Eyck and Ingres have used the mirror in works of art without creating a tension between artwork and viewer. Velazquez' painting entitled "Las Meninas" comes closest to challenging traditional spatial conceptions and it may be that his painting influenced Manet's painting (Hartt, 1985; Hauner, 1975). "The Bar at the Folies Bergere (is) an appropriate last major work" (Adler, 1986, p. 227) and "a look back at history shows (us) how (this new conception of the viewer and pictorial space helped to bring) "about the Cubists' witty questioning of the very nature of reality and illusion, and the Dadaists' proposals, extended to contemporary conceptual arts" (Hanson, 1979, p. 204).
APPENDIX D

PHASE ONE: WRITTEN INSTRUCTIONS AND LESSON PLAN FORM
PHASE ONE: WRITTEN INSTRUCTIONS AND LESSON PLAN FORM

Instructions:

The purpose of this activity is to see how teacher's use particular works of art in their planning and teaching. Develop and write a lesson plan that uses Manet's "Bar at the Folies Bergere" along with a studio activity.

Your lesson should be aimed at a class of upper elementary aged students (grades 4 or 5). Since you may be asked to later teach the lesson you plan today, your lesson should be similar in structure to lessons you normally plan or teach.

You may choose supporting works of art from the brown folders.

In developing your lesson plan you will of course, draw on your own knowledge of art and teaching. But, you may also use to any material on the table as a reference. If you do use any ideas or information from any of the material on this table, please indicate it in your lesson plan with parentheses.

Take as much time as you need to complete the lesson plan, but please do not discuss what you are planning with any other teacher at your table.

Please follow the basic lesson plan format provided.

Some blank sheets of paper have been supplied for your use as scrap paper or if you need more space than is provided on the lesson plan form. Please turn all paper you use, even if it's just scratch paper.

Please read the paragraph on the following page before you begin.
The choice of Manet's painting is not an arbitrary decision.

In fact, Manet is regarded as a pivotal figure in the history of art and a vital influence on the painters in his own day. In his lucid and charming surfaces one can see a complicated synthesis of past and present that anticipated so much of what was to come later in art. His paintings ask questions that reverberate. Manet shared many ideas with Impressionist artists such as Monet and Degas, and many people consider him to be an influential figure in the development of Impressionism. Trained as a traditional painter, Manet traveled throughout Europe and was particularly attracted to the paintings and brushwork of Diego Velazquez of Spain.

Primarily a painter of contemporary life, two subjects constantly appear in Manet's work: Paris and women. Both of these subject are included in his final masterpiece, "The Bar in the Folies-Bergere", completed two years before his death and shown in the Salon of 1882. The painting is a masterpiece of perfect balance and strict composition; dark colors in the background are brightened by light colors in the foreground: white circles of light, the skin-tone of the girl tending bar and the shimmering chandeliers, all blending in a delightful harmony of colors. The woman stands behind a marble bar in front of a large mirror that reflects the busy activity of a music hall. The mirror reflection gives the illusion of deep space within a shallow area. Everything and everyone meets at the surface of the canvas, poised as if in question. Perspective is disrupted. We realize from the man's reflection in the mirror at the right, that he is standing as we are when we look at the scene; his image draws us into the composition of the painting.

Although the mirror has been used in other works of art, notably van Eyck, Velazquez, and Ingres, Manet's use of the mirror creates a space that is uniquely ambiguous. Manet seems to be both a traditionalist and a remarkable innovator; a compound of romantic and realist capable of working in a variety of styles; a revolutionary from within the Parisian bourgeoisie hankering after official recognition. Living in a century when science had demonstrated that no one man can begin to know the universe, Manet was not interested in trying to say: 'Here is an instant in a day, to be accepted for what it is,
without too much concern over its place in the vast, incomprehensible scheme of things'.

So, you can see that both Manet and this painting hold an important place in the history of art.

(INTEGRATED CONTEXTUAL INFORMATION)

The choice of Manet's painting is not an arbitrary decision.

In fact, many artists and scholars acknowledge the importance of Manet's work to the development of modern art. These individuals generally focus on Manet's use of modern subject matter, his method of paint application, and his use of space to distinguish him as one of the great painters. While no doubt all of these factors contribute to his prominent position in the history of art, it is his involvement of the viewer in the work of art that is most unique. Manet's painting entitled "The Bar in the Folies-Bergere" ideally illustrates this point.

Spatially, "The Bar in the Folies-Bergere" is the most complex image created up to his time in the history of art. At first glance the work seems rather straightforward. A woman stands behind a marble bar laden with fruit, flowers, and bottles of champagne and liqueurs. She looks out at the viewer with an absent, weary and dispirited expression. Closer inspection reveals that she actually stands before a large mirror that reflects the excitement and activity of a large music hall. Since the nearer edge of the bar is cut off by the frame, we have the illusion that its surface extends into our space, and that we as spectators are ordering a drink from the stolid barmaid. This illusion is reinforced by the reflection in the mirror, which fills the entire background of the picture. We can clearly make out a back view of the barmaid, in conversation with a top-hatted gentleman who must be also the spectator. Thus, it is as though the canvas itself is but a reflection of our world, and only the barmaid stands between the painting and ourselves. As spectators we then take an active part in the painting, and it may well have been Manet's intention to make the picture seem an extension of our world as well.

By actively involving the viewer in the painting, Manet has eliminated the last vestiges of the Renaissance conception of pictorial space which saw the viewer as passive and the canvas as a window into space. It should be recognized the mirror alone is not responsible for this new conception of the viewer as active participant, rather
the mirror is a useful device that adds complexity to the painting. Other artists such as van Eyck and Ingres have used the mirror in works of art without creating a tension between artwork and viewer. Velázquez' painting entitled "Las Meninas" comes closest to challenging traditional spatial conceptions and it may be that this work influenced Manet's painting. "The Bar at the Folies Bergere" is an appropriate last major work and a look back at history shows us how this new conception of the viewer and pictorial space helped to bring about much of contemporary art.

So, you can see that both Manet and this painting hold an important place in the history of art.
Lesson Title: ____________________________________

Grade Level: Upper Elementary, Grades 4 or 5

Length of class in minutes: ______________________

Key artwork: "The Bar at the Folies Bergere" by Edouard Manet

Supporting artwork(s) [from notebooks]:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
Briefly describe the lesson objectives or the focus of learning:
MATERIALS

Completely list the materials you will use in your lesson:
INTRODUCTION TO THE ARTWORK

Describe as completely as you can how you or your students will make use of "Bar in the Folies-Bergere" in your lesson:
Describe as completely as possible how you and your students will use the supporting work(s) of art in your lesson:
STUDIO PORTION OF THE LESSON

Describe as completely as you can the studio portion of the lesson, including what your students will do:
EVALUATION PORTION OF THE LESSON

Describe the evaluative strategy you will use to determine if the students learned what you intended:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX E

PHASE ONE: BACKGROUND QUESTIONNAIRES
PHASE ONE: BACKGROUND QUESTIONNAIRES

This brief questionnaire will provide information about your knowledge of Manet and the painting "Bar at the Folies Bergere". Please answer the questions as accurately as you can. As with other parts of this study, your answers will be confidential. After you have completed this questionnaire, go on to the packet with the green cover.

1. Check the phrase that best reflects your knowledge of Edouard Manet and his work in general.

   ___ Not familiar with Manet or his work before today.
   ___ Familiar with Manet's name but could not pick his work out of a group. Know little or nothing about his life.
   ___ Know a little about Manet and the time he lived. Could probably pick other works by him out of a group.
   ___ Know Manet and his time reasonably well. Could select his work from a group of paintings.
   ___ Know Manet, his work, and his time very well. Know about artists he knew, studied with, and admired.

2. Have you ever used a work of art by Manet in your teaching or lesson planning?

   ___ Yes  ___ No  ___ Not sure

   If yes, briefly describe the focus of the lesson.

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
3. Were you familiar with Manet's "Bar at the Folies-Bergere" before today?
   
   ____ Yes  ____ No  ____ Not sure

   If yes, where and in what circumstances have you encountered the painting?
   
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

4. How have you learned about Manet and his work? Check any answers that apply and answer as completely as you can in the space below each answer. If you check an answer but cannot remember the details, just write "Don't remember" in the space.

   ____ College art history course. What course?
   ______________________________________________________
   ______________________________________________________

   ____ College art education course. What course?
   ______________________________________________________
   ______________________________________________________

   ____ Other college course? What course?
   ______________________________________________________
   ______________________________________________________

   ____ Attended exhibition of Manet's work. What exhibition? Where?
   ______________________________________________________
   ______________________________________________________
___ Read book about the artist. What book?


___ Read magazine article. What article? What magazine?


___ Attended lecture about Manet. When and where?


___ Saw film about the artist. When and where?


___ Other:


GO TO THE PACKET WITH THE GREEN COVER
This questionnaire will provide information on your current teaching status, your teaching experience and practices, and your art and art education training. Please answer the questions as accurately as you can. As with other parts of this study, your answers will be confidential.

QUESTIONS 1 THROUGH 7 REFER TO YOUR GENERAL TEACHING PRACTICES

1. Including this year, how many years have you taught art? (circle one)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>pre-student</td>
<td>student 1 yr</td>
<td>2-4 yrs</td>
<td>5-10 yrs</td>
</tr>
<tr>
<td>teaching</td>
<td>teaching</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. On average how often do you currently include study and/or discussion of artists and their artworks in your plans and/or lessons? (check one)

___ Always (10 out of 10 lessons)
___ Frequently (8 out of 10 lessons)
___ Often (6 out of 10 lessons)
___ Occasionally (4 out of 10 lessons)
___ Rarely (2 out of 10 lessons)
___ Never (0 out of 10 lessons)

3. Reflect on your art planning and teaching practices and check the phase that best describes how important art history is in your lessons.

___ Including art history in my lessons and teaching is MORE important to me now than it has been in the past.
___ Including art history in my lessons and teaching is as (SAME) important to me now as it has been in the past.
___ Including art history in my lessons and teaching is LESS important to me now than it has been in the past.
___ Including art history in my lessons and teaching has NEVER been important to me.

4. On average how often do you include a studio activity in your plans and lessons? (check one)
5. Check the sentence that best describes your use of art history and studio together in your plans and lessons.

____ I ALWAYS (10 out of 10 lessons) combine study of art history with studio processes in my plans and lessons.

____ I FREQUENTLY (8 out of 10 lessons) combine study of art history with studio processes in my plans and lessons.

____ I OFTEN (6 out of 10 lessons) combine the study of art history with studio processes in my plans and lessons.

____ I OCCASIONALLY (4 out of 10 lessons) combine the study of art history with studio processes in my plans and lessons.

____ I RARELY (2 out of 10 lessons) combine the study of art history with studio processes in my plans and lessons.

____ I NEVER (0 out of 10 lessons) combine the study of art history with studio processes in my plans and lessons.
6. When you use visuals in your plans and lessons HOW OFTEN do you use the following kinds of visuals? (circle the most accurate letter)

[A] = ALWAYS (10 out of 10 lessons)
[B] = FREQUENTLY (8 out of 10 lessons)
[C] = OFTEN (6 out of 10 lessons)
[D] = OCCASIONALLY (4 out of 10 lessons)
[E] = RARELY (2 out of 10 lessons)
[F] = NEVER (0 out of 10 lessons)

Art Reproductions............[A] [B] [C] [D] [E] [F]
Film strips....................[A] [B] [C] [D] [E] [F]
Actual artworks.................[A] [B] [C] [D] [E] [F]
Films or videos...............[A] [B] [C] [D] [E] [F]
Photocopies....................[A] [B] [C] [D] [E] [F]
Slide sets
(commercially prepared)......[A] [B] [C] [D] [E] [F]
Post-cards.....................[A] [B] [C] [D] [E] [F]
Three dimensional replicas....[A] [B] [C] [D] [E] [F]
Slides (teacher prepared).....[A] [B] [C] [D] [E] [F]
Other: ____________________________
7. Reflect on what you emphasize when you include artworks and artists in your plans and lessons. Circle the letter that corresponds to the frequency with which you generally discuss the following aspects of artworks and artists.

[A] = ALWAYS (10 out of 10 lessons)
[B] = FREQUENTLY (8 out of 10 lessons)
[C] = OFTEN (6 out of 10 lessons)
[D] = OCCASIONALLY (4 out of 10 lessons)
[E] = RARELY (2 out of 10 lessons)
[F] = NEVER (0 out of 10 lessons)

Color........................[A] [B] [C] [D] [E] [F]
Line..........................[A] [B] [C] [D] [E] [F]
Shape........................[A] [B] [C] [D] [E] [F]
Form..........................[A] [B] [C] [D] [E] [F]
Mood &/or emotion............[A] [B] [C] [D] [E] [F]
Subject matter.................[A] [B] [C] [D] [E] [F]
Medium.......................[A] [B] [C] [D] [E] [F]
Aspects of style...............[A] [B] [C] [D] [E] [F]
The artist's life...............[A] [B] [C] [D] [E] [F]
The time period and/or culture in which the artwork was created...........[A] [B] [C] [D] [E] [F]
Why the artist created the artwork....................[A] [B] [C] [D] [E] [F]
What the artist said about art or the artwork......[A] [B] [C] [D] [E] [F]
What others said about the artist &/or artwork..........[A] [B] [C] [D] [E] [F]
Other (please explain): _______________________________

________________________________________________

PLEASE GO TO THE NEXT PAGE
QUESTIONS 8 THROUGH 15 REFER TO YOUR CURRENT TEACHING ASSIGNMENT: If you are currently student teaching or enrolled in a pre-student teaching course, please go to question 16.

8. In how many schools do you currently teach art? (check one)
   ____ 1 school    ____ 2 schools
   ____ 3 schools    ____ more than 3 schools

9. Do you teach in an art room? (If you travel between schools check the answer that best fits the school where you teach the most.)
   ____ Yes    ____ Sometimes    ____ No

10. Check the response that best describes the number of students you currently teach.
    ____ 100-250 students    ____ 251-500 students
        ____ 501-750 students    ____ over 750 students

11. Including this year, how long have you taught art in your district?
    1 year    2-4 years    5-10 years    over 10 years

12. How would you best describe the socio-economic level of the students and families you teach? (check all answers that apply)
    ____ low income    ____ middle income    ____ high income

13. How would you describe your district?
    (check the best answer)
    ____ inner city    ____ urban    ____ suburban
        ____ rural    ____ other:______________

14. On average, how many art classes do you teach each day?
    ____ 3 classes    ____ 4 classes    ____ 5 classes
        ____ 6 classes    ____ more than 6 classes

15. Add the number of 4th and 5th grade classes you teach together and circle that number below.
    1 2 3 4 5 6 7 8    more than 8
QUESTIONS 16 THROUGH 25 REFER TO YOUR ART TRAINING AND EDUCATION

16. What is/was your undergraduate degree and major in college? (check all that apply)

___ B.A. ___ B.S. ___ B.F.A. ___ Other:

___ Education ___ Art Education

___ Studio, specify area:________________________

Other:_____________________________________

17. How did you earn teaching certification? (If you are currently enrolled in a certification program, indicate the kind of certification you will receive.)

___ Undergraduate certification

___ Post-baccalaureate certification

18. Please check any post-baccalaureate degrees you possess.

___ Masters Degree, specify area of study:

______________________________

___ Doctorate (PhD or EdD), area of study:

______________________________

___ Other, specify:

______________________________

19. Check the category that best describes the size of the undergraduate institution you attend or attended.

___ Under 2000 students ___ 10,001-25,000 students

___ 2000-5000 students ___ 25,001-50,000 students

___ 5001-10,000 students ___ Over 50,000 students

20. In the space below, please write the state in which your undergraduate institution is located.

______________________________
21. Not including inservice workshops, how many art history courses have you taken? (check the appropriate response)

___ 2 courses  ___ 3 courses  ___ 4 courses
___ 5 courses  ___ 6 courses  ___ more than 6

22. Check any responses below that reflect the content of the art history courses you have taken.

___ survey of western art history, Stone Age through Renaissance art
___ survey of western art history, Renaissance art through Modern art
___ Contemporary art  ___ Asian art
___ African art  ___ Native American art
___ Middle Eastern art  ___ Art of South America
___ Italian Renaissance  ___ Others: ____________

23. Have you had other art history or studio experiences that have helped you understand or teach these subjects better? (for example: inservice workshops, museum programs, etc...)

___ Yes  ___ No

If yes, briefly describe one such experience.

________________________________________________________________________

________________________________________________________________________

24. Have you participated in institute(s) sponsored by the Ohio Partnership for the Arts in Education?

___ Yes  ___ No

If yes, briefly describe something you learned in the institute(s) that helped you understand or teach art history better.

________________________________________________________________________
25. Using the scale below, circle the letter that best reflects your understanding of the following studio processes.

Acrylic painting
Oil painting
Tempera painting
Watercolor painting
Charcoal & pastel drawing
Pen & ink drawing
Graphite & colored pencil drawing
Photography
Film &/or video
Clay
Glassblowing
Weaving
Other fiber &/or fabric
Bookmaking
Papermaking
Lithography
Intaglio &/or Etching
Relief printing
Silkscreen
Sculpture
Jewelry making
Design

Other:
APPENDIX F

REFERENCE MATERIAL AVAILABLE TO PARTICIPANTS
DURING LESSON PLANNING
REFERENCE MATERIAL AVAILABLE TO PARTICIPANTS DURING LESSON PLANNING


Reference notebooks including the following articles:

<table>
<thead>
<tr>
<th>notebook reference</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>pp. 9-10</strong></td>
<td>Canaday, J. (1983). 'We must be of our time and work with what we see'. <em>Smithsonian, 14</em>(6), 90-101.</td>
</tr>
<tr>
<td>Page Range</td>
<td>Author and Title</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>


APPENDIX G

PROTOCOL FOR PHASE TWO: FOLLOW-UP INTERVIEW
PROTOCOL FOR PHASE TWO: FOLLOW-UP INTERVIEW

SAY: I'd like to thank you again for agreeing to teach this lesson today. Your participation in this study will help me understand how individuals with different levels of teaching experience approach lesson planning and teaching. Since I'm going to compare lessons written and presented by several different people, I will follow a set of prepared questions as I ask you about today's lesson. These questions are meant to give you a chance to reflect on the lesson.

(pause)

SAY: How do you think the lesson went overall?

What went the best? (probe)

What would you change? (probe)

SAY: Could you describe something you altered between the plan and the presentation and why?

SAY: Let's discuss the beginning of your lesson where you discuss Manet and the supporting works of art. You emphasized_________________. What led you to this focus? Was there anything you wish you had added to this part of the lesson?

Was there anything you should have left out?

SAY: Let's discuss the studio portion of the lesson. The students__________. Could you explain how the studio activity relates to the Manet painting?

Reviewing the lesson, was there anything you could have added to make the connection stronger? Should or could anything have been left out?

SAY: Is there any other part of the lesson you would like to discuss?

ALSO (if not answered above): How did you decide on your lesson focus?
APPENDIX H

PROTOCOL FOR PHASE THREE: CONTENT KNOWLEDGE INTERVIEW
PROTOCOL FOR PHASE THREE: CONTENT KNOWLEDGE INTERVIEW

SAY: Thank you for agreeing to participate in this last phase of my dissertation. In a few weeks I will have completed all of these interviews and will begin to make sense of everyone's responses. I expect I will have a finished copy of the results by the end of June. If you wish, I will make a copy of the results for you.

I'm going to divide today's interview into several sections. First, I'd like to explore how you think about specific art subject matter in connection with art teaching. I have a few sorting activities that I'd like you to do that should facilitate conversation. Then, I'd like to discuss how you use your art knowledge when you plan lessons. Finally, I'll close with some questions about your background that expand the background questionnaire you completed during the lesson planning activity.

Remember that the questions I ask you are not designed to have correct or incorrect answers but are meant to facilitate discussion so that I can understand how you think about subject matter, planning and teaching.

1.0 SUPPORTING ARTWORK SORTING ACTIVITY

DO: Place the supporting artworks on the table.

SAY: You may remember these images from the supporting artwork notebook in the lesson plan writing activity.

Think about these images in relation to the "Bar at the Folies-Bergere", and sort the images into groups that make sense to you.

You may have as many or as few groups as you wish.

DO: Wait until the participant indicates he/she is finished grouping the images.

DO: Point to the first group.

ASK: Could you explain why you grouped these images together?

DO: Repeat above question until all groups are discussed.
DO: Point to the first group discussed.
ASK: In relation to the "Bar at the Folies-Bergere", can you think of any other artworks or images that should go into this category?
DO: Repeat above question with several or all groups.
ASK: Which of these groups are best to use when teaching upper elementary aged students about Manet for the first time? PROBE
ASK: Are there other images not included here that would help students to understand Manet and "Bar at the Folies-Bergere" better? PROBE
SAY: Now, I'd like you to place these groups in order of importance starting with the group that is most important and ending with the group that is least important when discussing "The Bar at the Folies-Bergere" with upper elementary aged students.
PROBE: The relationship between groups of images and the participant's understanding of the possible content for art lessons using specific groups.
DO: Using grid, draw a diagram of the way the images are grouped and ordered.
PAUSE
SAY: You can usually look at artworks in several different ways.
ASK: Can you rearrange any of these artworks to make new groups or to fit in other categories?
DO: Wait until changes are made and prompt to participant to explain why particular artworks fit into the other or new groups.
DO: Draw a diagram of the new groups.
PAUSE

2.0 SORTING WRITINGS ABOUT THE PAINTING AND MANET
SAY: Now I'd like to do a sorting activity that involves ideas rather than images.
DO: Place the concept statements on the table.

SAY: First, I'd like you to go through these statements and place them into two piles: statements that match or don't match what you understand to be true about Manet and the painting.

DO: Place green cards: MATCHES and DOES NOT MATCH on the table. Wait while the participant reads and sorts each statement.

DO: Encourage the participant to verbalize his/her decision making process as he/she go about the task. To facilitate this process the participant could read the statement aloud and then talk about where the statement fits.

DO: Probe reasons why participant put statements in not match category. Read and discuss several in relation to the painting.

SAY: Now I'd like you to place each of the statements in the MATCHES group in order from the statement or statements which contain the simplest idea(s) to the statement(s) that contain(s) the most complex idea(s).

If two statements seem to be equally complex, just place them next to each other (demonstrate).

DO: Place the green cards: SIMPLEST IDEA and MOST COMPLEX IDEA on the table. Wait while participant orders the statements. When participant is finished, number the cards and draw a diagram.

ASK: Why is this statement (point) more complex than this statement (point)?

DO: Probe and repeat until the relationships between the statements are explained.

ASK: Which ideas/statements are best for talking about Manet and the painting with upper elementary aged children?

(If participant says that all statements can be used in upper elementary art classes. Ask which are best to explore initially. Or ask what concepts would need to be understood by the students before they could fully grasp the most complex idea.)
DO: Point to a statement placed in a more complex position than the statement(s) the participant indicated was most appropriate for upper elementary aged children.

ASK: What would upper elementary aged students have to know about art in order to understand this concept?

DO: Prompt and probe as necessary. Option: ask same question with another statement/concept.

PAUSE

3.0 LESSON PLANNING

SAY: The lesson plan you wrote for me will help me understand how people approach the particular artworks, but I know in real lesson planning situations you may go about it in a different way. I'd now like to shift our discussion to lesson plan development so I can get a better understanding of how you normally get ideas and plan lessons.

ASK: Where do you usually get ideas for lessons?

ASK: After you have a general idea, what do you do then?

ASK: What factors influence your planning?

PROMPT: Do any of the following influence the content of your plans? How?

Specific classes or personalities
Grade level
Available materials
School event
Time of year
Focus of regular class activity (i.e. social studies or science unit)

ASK: If you had unlimited time and resources, how would you go about planning an actual unit that involved study of Edouard Manet? PROBE FOR REASONS

ASK: How would you go about planning an actual unit of study around the concept contained in this statement: Some works of art prompt speculations on the relationship between reality and image.
**ASK:** Would it be different from the way you go about planning a unit involving study of particular artists?

**PAUSE**

4.0 RELATING MANET'S PAINTING TO OTHER LESSON PLANS

**SAY:** When you planned and presented the lesson that involved Manet's "Bar at the Folies-Bergere" the main thrust of your lesson was _________________.

**ASK:** Can you come up with another way to use this painting in another lesson? Describe what you would do.

**ASK:** How about another way of using the painting?

**PAUSE**

5.0 BACKGROUND, TRAINING, PEDAGOGICAL DECISION MAKING

**SAY:** In the background survey you said that you've taken ___ (number) art history courses, including a western art history course that covers the late 19th century.

**ASK:** Do you remember what textbook you used in this course?

**ASK:** Did you encounter Manet in this/these classes?

**DO:** Place Manet images on table.

**SAY:** Point out any of the images you remember studying.

**DO:** Circle the images on this list that the participant points out:

Lola de Valance  
Mlle V....in the Costume of an Espada  
Luncheon on the Grass  
Olympia  
The Dead Christ with Angels  
The Fifer  
The Balcony  
The Railroad  
Boating  
Luncheon in the Studio  
Girl Serving Beer
ASK: It has been said that Manet is one of the first modern artists. What do you think that means? Do you agree? Why?

ASK: Some people think of Manet as an Impressionist painter and some people say that he was not an Impressionist. What do you think? Why?

PAUSE

SAY: The studio activity in your lesson involved ________. I'd like to discuss you studio training in this area.

ASK: How have you learned and gained experience in this process? (Prompt as necessary)

ASK: How do you learn new studio techniques or media?

ASK: Can you talk about how you use what you know to teach children? PROBE

PAUSE

SAY: Thank you so much for helping me with my dissertation. I really appreciate your effort.
APPENDIX I

STATEMENTS USED IN IDEA SORTING TASK IN PHASE THREE
STATEMENTS USED IN IDEA SORTING TASK IN PHASE THREE

From writing aimed at novice art learners:

Manet is one of the earliest and best known of the Impressionists.

The bold outlines seem to project his figures outward from the canvas.

Influenced by Spanish painting, Manet is both a traditionalist and an innovator.

The painting is powerful because it is ambiguous.

Manet's ability to manipulate paint as seen in the dazzling still life and the shimmering crowds makes him a great artist.

Manet's painting seems spontaneous. He did not pose the figures in this picture, but painted them as he found them.

In some places, the paint is stoked on carefully. In others it is dabbed on or pulled across the canvas.

The most important part of this painting is the light.

Manet felt that the message of the artist was the brush strokes and patches of paint on the canvas, not the subject matter that they represented.

Manet wanted to make paintings that could be enjoyed for their own sake, for their color and arrangement, and for the fact that they were paintings and not imitations of nature.

From writing for art experts:

The idea of solitude is expressed in the motionless figure, isolated amid the elegant animated crowd and sparkling lights.

It is as though the canvas itself is but a reflection of our world.
Spatially, this is the most complex image thus far in the history of western art.

The painting prompts speculations on the relationship of reality and image.

Manet's painting is loaded with questions, not with answers, and the enigmatic nature of the interaction between the barmaid and the spectator is one of the unanswerable puzzles it poses.

Manet's independence with in the context of the avant-garde makes him difficult to classify.

The complexity and diversity of Manet's images make single minded approaches to interpreting his works unsatisfactory.

For the original audience, the painting was a challenge directed at the self-contained world that paintings then inhabited.

In this painting, subject and style are densely interwoven giving us a rich display of an illusionary fragmented world.

A single figure like an icon dominates the whole painted surface.
APPENDIX J

PARTICIPANTS' SELECTION OF MATCHING AND NON-MATCHING STATEMENTS ABOUT MANET
PARTICIPANTS' SELECTION OF MATCHING AND NON-MATCHING STATEMENTS ABOUT MANET

Beth
beginning art education student
fragmented Contextual Information

DOES NOT MATCH

The painting is powerful because it is ambiguous.

Manet's independence with in the context of the avant-garde makes him difficult to classify.

The complexity and diversity of Manet's images make single minded approaches to interpreting his works unsatisfactory.

A single figure like an icon dominates the whole painted surface.

MATCHES

Level 1
The bold outlines seem to project his figures outward from the canvas.

It is as though the canvas itself is but a reflection of our world.

Level 2
Influenced by Spanish painting, Manet is both a traditionalist and an innovator.

Manet is one of the earliest and best known of the Impressionists.

The most important part of this painting is the light.

Level 3
The painting prompts speculations on the relationship of reality and image.

Spatially, this is the most complex image thus far in the history of western art.

In some places, the paint is stroked on carefully. In others it is dabbed on or pulled across the canvas.
Level 4
Manet's painting seems spontaneous. He did not pose the figures in this picture, but painted them as he found them.

Manet wanted to make paintings that could be enjoyed for their own sake, for their color and arrangement, and for the fact that they were paintings and not imitations of nature.

Manet felt that the message of the artist was the brush strokes and patches of paint on the canvas, not the subject matter that they represented.

The idea of solitude is expressed in the motionless figure, isolated amid the elegant animated crowd and sparkling lights.

Manet's ability to manipulate paint as seen in the dazzling still life and the shimmering crowds makes him a great artist.

Level 5
In this painting, subject and style are densely interwoven giving us a rich display of an illusionary fragmented world.

Level 6
Manet's painting is loaded with questions, not with answers, and the enigmatic nature of the interaction between the barmaid and the spectator is one of the unanswerable puzzles it poses.

For the original audience, the painting was a challenge directed at the self-contained world that paintings then inhabited.

Valerie
beginning art education student
integrated Contextual Information

DOES NOT MATCH

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Spatially, this is the most complex image thus far in the history of western art.

Manet's independence with in the context of the avant-garde makes him difficult to classify.

A single figure like an icon dominates the whole painted surface.

**MATCHES**

**Level 1**
The most important part of this painting is the light.

**Level 2**
In some places, the paint is stroked on carefully. In others it is dabbed on or pulled across the canvas.

**Level 3**
The bold outlines seem to project his figures outward from the canvas.

**Level 4**
The painting is powerful because it is ambiguous.

**Level 5**
Manet's ability to manipulate paint as seen in the dazzling still life and the shimmering crowds makes him a great artist.

**Level 6**
The painting prompts speculations on the relationship of reality and image.

**Level 7**
The idea of solitude is expressed in the motionless figure, isolated amid the elegant animated crowd and sparkling lights.

**Level 8**
It is as though the canvas itself is but a reflection of our world.
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The complexity and diversity of Manet's images make single minded approaches to interpreting his works unsatisfactory.

The painting is powerful because it is ambiguous.

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MATCHES

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Level 5
The complexity and diversity of Manet's images make single minded approaches to interpreting his works unsatisfactory.
The idea of solitude is expressed in the motionless figure, isolated amid the elegant animated crowd and sparkling lights.

**Level 6**
In this painting, subject and style are densely interwoven giving us a rich display of an illusionary fragmented world.

Laura  
intermediate art education student  
integrated Contextual Information

**DOES NOT MATCH**

The bold outlines seem to project his figures outward from the canvas.

Manet's painting seems spontaneous. He did not pose the figures in this picture, but painted them as he found them.

The most important part of this painting is the light.

Spatially, this is the most complex image thus far in the history of western art.

A single figure like an icon dominates the whole painted surface.

**MATCHES**

**Level 1**

Manet is one of the earliest and best known of the Impressionists.

In some places, the paint is stroked on carefully. In others it is dabbed on or pulled across the canvas.

**Level 2**

Manet's ability to manipulate paint as seen in the dazzling still life and the shimmering crowds makes him a great artist.

**Level 3**

In this painting, subject and style are densely interwoven giving us a rich display of an illusionary fragmented world.
Manet felt that the message of the artist was the brush strokes and patches of paint on the canvas, not the subject matter that they represented.

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MATCHES

Level 1
A single figure like an icon dominates the whole painted surface.

Level 2
The bold outlines seem to project his figures outward from the canvas.

Level 3
It is as though the canvas itself is but a reflection of our world.

Level 4
The idea of solitude is expressed in the motionless figure, isolated amid the elegant animated crowd and sparkling lights.
Level 5
In some places, the paint is stroked on carefully. In others it is dabbed on or pulled across the canvas.

Level 6
Manet wanted to make paintings that could be enjoyed for their own sake, for their color and arrangement, and for the fact that they were paintings and not imitations of nature.

Level 7
For the original audience, the painting was a challenge directed at the self-contained world that paintings then inhabited.

The complexity and diversity of Manet's images make single minded approaches to interpreting his works unsatisfactory.

Manet's independence with in the context of the avant-garde makes him difficult to classify.

Level 8
Manet's painting is loaded with questions, not with answers, and the enigmatic nature of the interaction between the barmaid and the spectator is one of the unanswerable puzzles it poses.

The painting is powerful because it is ambiguous.

The painting prompts speculations on the relationship of reality and image.

David
student teacher
fragmented Contextual Information

DOES NOT MATCH

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The complexity and diversity of Manet's images make single minded approaches to interpreting his works unsatisfactory.

A single figure like an icon dominates the whole painted surface.

MATCHES

Level 1
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It is as though the canvas itself is but a reflection of our world.

Manet is one of the earliest and best known of the Impressionists.

Level 2
In some places, the paint is stroked on carefully. In others it is dabbed on or pulled across the canvas.

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The most important part of this painting is the light.

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Influenced by Spanish painting, Manet is both a traditionalist and an innovator.

The bold outlines seem to project his figures outward from the canvas.

Level 3
The idea of solitude is expressed in the motionless figure, isolated amid the elegant animated crowd and sparkling lights.

In this painting, subject and style are densely interwoven giving us a rich display of an illusionary fragmented world.
Manet wanted to make paintings that could be enjoyed for their own sake, for their color and arrangement, and for the fact that they were paintings and not imitations of nature.

**Level 4**
The painting prompts speculations on the relationship of reality and image.

For the original audience, the painting was a challenge directed at the self-contained world that paintings then inhabited.

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**Alice**
student teacher
fragmented Contextual Information

**DOES NOT MATCH**

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A single figure like an icon dominates the whole painted surface.
MATCHES

**Level 1**
In some places, the paint is stroked on carefully. In others it is dabbed on or pulled across the canvas.

**Level 2**
The bold outlines seem to project his figures outward from the canvas.

**Level 3**
Manet wanted to make paintings that could be enjoyed for their own sake, for their color and arrangement, and for the fact that they were paintings and not imitations of nature.

**Level 4**
Manet's independence within the context of the avant-garde makes him difficult to classify.

**Level 5**
Spatially, this is the most complex image thus far in the history of western art.

**Level 6**
In this painting, subject and style are densely interwoven giving us a rich display of an illusionary fragmented world.

**Level 7**
The idea of solitude is expressed in the motionless figure, isolated amid the elegant animated crowd and sparkling lights.

**Level 8**
The complexity and diversity of Manet's images make single-minded approaches to interpreting his works unsatisfactory.

**Level 9**
The painting prompts speculations on the relationship of reality and image.

**Level 10**
For the original audience, the painting was a challenge directed at the self-contained world that paintings then inhabited.
Level 11
Manet's painting is loaded with questions, not with answers, and the enigmatic nature of the interaction between the barmaid and the spectator is one of the unanswerable puzzles it poses.

Greg
student teacher
integrated Contextual Information

DOES NOT MATCH
The bold outlines seem to project his figures outward from the canvas.

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MATCHES

Level 1
Manet is one of the earliest and best known of the Impressionists.

Level 2
The most important part of this painting is the light.

Level 3
Manet felt that the message of the artist was the brush strokes and patches of paint on the canvas, not the subject matter that they represented.

In some places, the paint is stroked on carefully. In others it is dabbed on or pulled across the canvas.

Level 4
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Level 5
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Level 6
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Level 7
For the original audience, the painting was a challenge directed at the self-contained world that paintings then inhabited.

Level 8
The complexity and diversity of Manet's images make single minded approaches to interpreting his works unsatisfactory.

Pam
experienced teacher
fragmented Contextual Information

DOES NOT MATCH

The most important part of this painting is the light.

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MATCHES

Level 1
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Level 2
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**Suzanne**

experienced teacher

integrated Contextual Information

**DOES NOT MATCH**

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**MATCHES**

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