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ART EXPERTS' VIEWS OF AN IDEAL CURRICULUM

Wanda T. May

Center for the Learning and Teaching of Elementary Subjects

Institute for Research on Teaching
College of Education
Michigan State University

MSU is an affirmative action/equal opportunity institution
The Center for the Learning and Teaching of Elementary Subjects was awarded to Michigan State University in 1987 after a nationwide competition. Funded by the Office of Educational Research and Improvement, U.S. Department of Education, the Elementary Subjects Center is a major project housed in the Institute for Research on Teaching (IRT). The program focuses on conceptual understanding, higher order thinking, and problem solving in elementary school teaching of mathematics, science, social studies, literature, and the arts. Center researchers are identifying exemplary curriculum, instruction, and evaluation practices in the teaching of these school subjects; studying these practices to build new hypotheses about how the effectiveness of elementary schools can be improved; testing these hypotheses through school-based research; and making specific recommendations for the improvement of school policies, instructional materials, assessment procedures, and teaching practices. Research questions include, What content should be taught when teaching these subjects for understanding and use of knowledge? How do teachers concentrate their teaching to use their limited resources best? and In what ways is good teaching subject matter-specific?

The work is designed to unfold in three phases, beginning with literature review and interview studies designed to elicit and synthesize the points of view of various stakeholders (representatives of the underlying academic disciplines, intellectual leaders and organizations concerned with curriculum and instruction in school subjects, classroom teachers, state- and district-level policymakers) concerning ideal curriculum, instruction, and evaluation practices in these five content areas at the elementary level. Phase II involves interview and observation methods designed to describe current practice, and in particular, best practice as observed in the classrooms of teachers believed to be outstanding. Phase II also involves analysis of curricula (both widely used curriculum series and distinctive curricula developed with special emphasis on conceptual understanding and higher order applications), as another approach to gathering information about current practices. In Phase III, models of ideal practice will be developed, based on what has been learned and synthesized from the first two phases, and will be tested through classroom intervention studies.

The findings of Center research are published by the IRT in the Elementary Subjects Center Series. Information about the Center is included in the IRT Communication Quarterly (a newsletter for practitioners) and in lists and catalogs of IRT publications. For more information, to receive a list or catalog, or to be placed on the IRT mailing list to receive the newsletter, please write to the Editor, Institute for Research on Teaching, 252 Erickson Hall, Michigan State University, East Lansing, Michigan 48824-1034.

Co-directors: Jere E. Brophy and Penelope L. Peterson
Senior Researchers: Patricia Cianciolo, Sandra Hollingsworth, Wanda May, Richard Prawat, Ralph Putnam, Taffy Raphael, Cheryl Rosaen, Kathleen Roth, Pamela Schram, Suzanne Wilson
Editor: Sandra Gross
Editorial Assistant: Tom Bowden
Abstract

This report summarizes and compares the views of six experts in art education concerned with teaching art for students' conceptual understanding at the elementary level. Two art education professors and three public school art specialists who teach art at the elementary level engaged in comprehensive written exercises to address issues related to curriculum, teaching, and evaluation in art education. In this report, experts examined the above issues from the perspective of an "ideal curriculum," that is, what curriculum, teaching, and learning ought to be in elementary art. They identified, described, critiqued, and discussed features of an ideal curriculum, goals in art education, key concepts and ideas in art, in what ways these key ideas are related, and how to organize and sequence these ideas with sample lessons in an effort to develop students' understanding in art. The report presents a comparative and contrastive analysis of the experts' responses on the above dimensions as well as their expressed or implicit views of art as a discipline and what it means to understand art. The findings then are summarized in light of their implications for planning, teaching, and learning in elementary art.
ART EXPERTS' VIEWS OF AN IDEAL CURRICULUM

Wanda T. May

Many people understand art in elementary schools superficially; that is, art means pleasurable, unintellectually demanding occasions for students to draw, paint, make clay pinch pots, express themselves "creatively," or exhibit their art products in a spring show for parents' night. However, most art experts understand that learning in/about art can provide students with very challenging opportunities to develop their visual sensibilities, depth of understanding, and critical thinking, in particular, aesthetic ways of knowing, seeing, and interpreting the world and human experience that few other subjects can proffer.

We can participate in many of the above school activities called "art" and still not understand or appreciate art very well when all is said and done. Some of our lack of understanding is due to the marginality of the arts in the school curriculum and the cumulative impact of missed opportunities over the years. Our impoverished visual sensibilities also are due to shallow, make-and-take activities when we did have something called art. On all accounts, curriculum can be viewed as what students have an opportunity to learn and experience (and not). In the following descriptions of planning and practice in art, art experts hold diverse views of what learning in art should engender and entail in order to promote students' depth of understanding and appreciation. They help us to see how art could be a provocative, powerful way to learn.

This report summarizes and compares the views of five experts concerned with teaching art for understanding at the elementary level: two university art

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1 A preliminary summary of this study's findings was presented at the annual meeting of the American Educational Research Association, Boston, April 16-20, 1990.
2 Wanda T. May, associate professor of teacher education at Michigan State University, is a senior researcher with the Center for the Learning and Teaching of Elementary Subjects.
education professors and three art teachers teaching in public schools at the elementary level. These experts engaged in comprehensive written exercises for Center researchers to address central issues related to curriculum, teaching, and evaluation in art education. First, the experts examined these issues from the perspective of the ideal; that is, what kinds of goals and key ideas in art are most worthy of teaching in elementary schools and how best to organize these to help students develop an in-depth understanding in art. Second, the experts examined Center goals and their own goals or key ideas from a pragmatic stance; that is, the experts submitted sample units or lesson plans to illustrate how their ideal curriculum would play out in teaching and how students' learning would be assessed. As relates to the arts, a similar study was conducted with music experts that included an intensive analysis of a popular music textbook series and in-depth interviews concerning these analyses (May, 1990). Since using textbooks in elementary art classes is not widespread practice, only Center researchers critiqued an art textbook series (May, 1993).

After some background is presented on the methods used for the selection of experts, data collection, and data analysis, the first section of this report describes university experts' views of an ideal art curriculum. The second section describes the teacher experts' views. The final section presents a comparative summary of all the experts' responses and implications of the findings for art education.

This study is part of Phase I of the research agenda of the Center for the Learning and Teaching of Elementary Subjects. Center researchers are engaged in a five-year program of research and development on elementary-level (Grades K-6) teaching and learning in mathematics, science, social studies, literature, and the arts, with particular emphasis on teaching these content areas for understanding and meaningful application. This study of Phase I involved developing and using a common set of framing questions to elicit the views of two
expert panels: (a) university professors involved with the scholarship and teacher education dimensions of elementary-level teaching in art, and (b) elementary art specialists/teachers with reputations for excellence in teaching the subject and developing students' understanding beyond rote learning, drill, and practice. While this report focuses on the views of experts in art, other Center reports focus on expert views in teaching elementary mathematics, music, science, social studies, and literature.3

Selection and Recruitment of Art Experts

Two panels of experts were recruited for this study. The first panel was to consist of three university-based professors in art education who are nationally recognized, scholarly leaders in the field and are particularly knowledgeable about elementary-level instruction in art. First, we contacted art specialists at Michigan State University and other universities by phone and asked them to nominate individuals who were: (a) scholarly leaders in the field; (b) familiar with curriculum, teaching, and evaluation practices at the elementary level; and (c) concerned about teaching art with an emphasis on developing students' understanding, critical/creative thinking, and problem solving.

Next, we shortened the list and prioritized it for desirable interviewees based in part on the information we received about the degree to which they fit all of the above three criteria and in part on our desire to achieve balance across theoretical perspectives on the nature and purposes of art education. Once consensus was reached on these short lists (including alternates) through discussion among Center researchers, we then called the identified scholars to explain the study and recruit their participation. While three university experts

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3 This comprehensive study conducted across school subjects was coordinated by Richard Prawat, professor of teacher education at Michigan State University and a senior researcher with the Center for the Learning and Teaching of Elementary Subjects.
agreed to participate in the study, one did not complete the study, despite encouragement and reminders. Alternates were contacted, but by this point none had enough time in their schedules to engage in the extensive analyses required in the study. Thus, only two university experts are represented in this study. This is unfortunate because the one who did not participate likely would have represented a somewhat different philosophical perspective than those of the other two.

The second panel consisted of three elementary art specialists who have impressed leading art education scholars and state-level leaders as being outstanding in teaching art for understanding and higher order applications. Given the paucity of research on elementary art teaching with a focus on teaching for understanding (either specialists or classroom teachers), we decided it would be best to recruit art specialists for this study who teach only at the elementary level, despite their holding K-12 certification. To identify such teachers, we called scholarly leaders in art education at universities all around the country (including those who were being recruited to participate in the study), described the kinds of teachers we were looking for, and asked for nominations. We also contacted leaders in the National Art Education Association (NAEA) for nominations of outstanding elementary art teachers.

We then contacted nominated teachers by phone and interviewed them concerning their educational backgrounds, teaching experience, and ideas about goals and methods for teaching music. Notes from the telephone interviews were used as the basis for discussion and selection of teachers. A short list of nominations was developed from these data, and teachers were prioritized on the basis of reflecting diverse but representative approaches to teaching art for understanding. We then called the teachers to ask them to participate in the study, and all those contacted agreed to participate.
Data Collection

In all the other Center expert studies across the different subject areas, data were developed from two primary sources: Part I (data generated by experts in the exercises reported in this study) and Part II (experts' written critiques of a commonly used textbook series and intensive interviews conducted on campus with researchers to clarify and elaborate on what they had written). Only Part I is described below because art experts did not participate in Part II of the study. This is because there is no widespread textbook adoption and/or use in elementary art compared with other subject areas.

Part I was the presentation of a detailed, written document in which the experts (both panels) responded to a common set of questions about an ideal curriculum. (See Appendix for the directions to participants and the set of questions for Part I.) Curriculum was defined broadly in this exercise as what students have an opportunity to learn. In other words, content knowledge, skills, and dispositions were addressed as well as a program's overall goals, key ideas/concepts and understandings among these goals, scope and sequence, texts and other materials, instructional methods, and evaluation of students' learning.

Questions in the Part I exercise asked experts to identify key features of ideal art curricula and then to apply these ideas by indicating how they would organize instruction related to each of the three broad goals in art education presented to the experts (or additional goals they may have generated themselves). These goals were derived by analyzing literature and position statements in art education and examining state and district-level curriculum documents and commercial materials produced specifically for elementary art. The three goals presented to the experts addressed the study of the elements of design or design principles (e.g., line, shape, color, texture); artistic processes such as thinking,
problem solving, or creating art forms with expressive intent; and art appreciation or aesthetics in social/historical context.

The experts were asked to identify key understandings related to each of these goals, indicate how these ideas are related, and describe how they would organize the ideas for presentation to students. Then, experts were asked to select one of the key understandings for each goal and indicate how they would teach it at the second- and fifth-grade levels. In these sample lesson plans, experts were to note the information that they would provide students, the nature of teacher-student discourse that would occur, the activities or assignments that would be included, and the methods they would use to evaluate student learning.

Instructions for Part I were sent to the panelists by mail and followed up with phone calls to make sure that they had arrived and to provide any needed clarification. The panelists then prepared written responses to Part I and mailed copies to us. The two university experts also submitted unsolicited articles or papers they had published or presented in national conferences as background information to elaborate or support their responses to the Center's questions on the written exercises.

The panelists received a modest honorarium for their time spent preparing written responses to Part I. As all experts and Center researchers discovered, these exercises required more time of the panelists than anticipated. Most panelists commented that the exercises were challenging and thought provoking, whether participating only in Part I or in both parts of the study.

Data Analysis

The panelists' individual written responses were duplicated for multiple analyses and coding. To protect the panelists' anonymity, the materials were assigned code numbers (P1 and P2 for the professors; T1, T2, and T3 for the
teachers), and names, institutional affiliations, and other personal references were removed from the printed data sources. Experts' quotations presented in this report that have no page number references are from the above data sources or Center exercises. Another unsolicited but helpful data source from the university experts were published articles or papers presented at national conferences that extended some of the topics or questions addressed in Part I. However, to protect participants' anonymity, quotes from these sources are not referenced in the standard way. Such quotes will be identified by P1 or P2, year, and page number. The use of page numbers with experts' quotations will indicate that these references have been peer reviewed and are in the public, scholarly domain. All experts submitted sample lesson plans, as requested, which were another data source. These were analyzed for their internal consistency and congruence with statements written in the assignment on key features, goals, concepts, descriptions of teaching, and evaluation of student learning.

The data were analyzed by the author in three stages. First, using the Part I questions as the primary framework, each expert's responses were categorized and coded for emergent themes within each of the sections of information (e.g., "goals"). Themes and patterns within and across these categories (by questions) were analyzed. For example, some panelists tended to respond to the questions directly and matter-of-factly; others elaborated extensively on both the questions and their responses, or digressed with information pertinent to other areas of the exercise. Secondly, after coding the themes of individual expert's responses to each of the areas addressed in the Part I exercise, a comparative analysis was conducted across each panel of experts. For example, the professors' responses were compared and contrasted as a set; the same comparative analysis was then conducted with the teachers' responses as a set.
Finally, the two groups of panelists' responses were compared and contrasted on each of the questions or dimensions of the exercise (e.g., teacher experts' responses were compared with those of university experts). With such a small sample, however, making sweeping generalizations about differences between teachers' and professors' views of ideal curricula is neither warranted nor very helpful. To some extent, similarities across experts will be due to the purposeful sampling and selection of experts, all of whom claimed they had a keen interest in teaching art for understanding, no matter their role, credential, or professional context. Any striking differences within or across panels are apt to be due to purposeful selection as well; that is, there was an attempt to choose experts who were likely to hold different theoretical perspectives or views about what counts as "understanding" in art in the first place and how best to achieve this in teaching art. Last but not least, five experts hardly reflect the cacophony of diverse interests, expertise, and theoretical perspectives characterizing any field. Disciplines have amorphous boundaries, are socially and historically constructed, and are not static entities devoid of human interests, contradictions, and change.

A Common Point of Reference: Ideal Features and Three Goals

All participants in this study were asked if they agreed with the features of ideal curricula listed below, to elaborate on any disagreements they might have, and to identify any additional features of curricula that they thought were important in art and which ought to be included. The key features were developed by Center researchers from a review and synthesis of the literature on cognition and teaching subject matter for understanding in general (Prawat, 1989) and from a literature review in elementary art and music in particular (May, 1989). These key features are as follows:
1. balancing breadth with depth by addressing limited content but developing it sufficiently to ensure conceptual understanding

2. organizing the content around a limited number of powerful ideas (basic understandings and principles rooted in the discipline)

3. emphasizing the relationships between powerful ideas, both by contrasting along common dimensions and integrating across dimensions, in order to produce knowledge structures that are differentiated yet cohesive

4. providing students not only with instruction but also with opportunities to actively process information and construct meaning

5. fostering problem solving and other higher order thinking skills in the context of knowledge application. Thus, the focus is less on thinking processes per se and more on how to make use of previously acquired knowledge in new contexts.

The goals presented to expert professors and teachers in this study were developed or derived by Center researchers analyzing the literature in art education, proposals and guidelines produced by the National Art Education Association, and several curriculum documents generated by state departments, provinces, and school districts in North America. The first goal was selected to address the fact that all curriculum documents featured the study of the elements of design and discussed art as a "language," symbol system, or form of communication to be visually perceived and communicated. The second goal focused on artistic processes, believing that to understand art, one must know what it feels like to make it or what one might think about when creating art with expressive intent. This goal, then, involves visual thinking processes, decision making, and technical skills that artists use when creating art. The third goal was selected because of its reference to developing positive dispositions toward art and understanding why people create art or engage in it as a human activity in social context. All of the curriculum documents examined had goals related to perceiving or viewing art, for example, learning to "read" and interpret art.
elements and design principles; art production or creating art and the kinds of thinking processes and skills required to generate visual images and art forms with intended effects on the viewer; and understanding and appreciating the social, cultural, and historical contexts of art and artists. Thus, the third goal reflects an interest in developing students' appreciation of art in personal and social context. Listed below are the goals presented to the art experts:

1. Develop an understanding of how visual elements and symbols (line, shape, color, texture) are selected, organized, and presented by artists to communicate meaning

2. Develop an understanding of the artistic process (choices, decision making, critical/creative thinking) in creating artistic forms with expressive intent (not merely to produce art forms)

3. Develop a disposition to actively "attend to" and enjoy art for its own sake (appreciate the diversity of art forms and how artists interpret human experience and the world around them; appreciate art as a form of human inquiry, expression, interpretation of the world)

The next section presents the two university experts' responses to the above key features and goals identified by the Center and how they conceived of ideal art curricula and powerful ideas, planned and enacted, at the second- and/or fifth-grade levels.

University Experts' Views of an Ideal Art Curriculum

Key Features of an Ideal Curriculum

P2 was in full agreement with the key features the Center outlined and said, "I cannot think of any other features to add to your list at this time." P1 strongly supported the above features of an ideal art curriculum and had quite a lot to say about these, suggesting the views presented by Center were "a scientific approach to the study of curricula . . ., [views] not widely held within the area of visual arts education during the past 50 years, nor have they found their way into
practice in the public schools." P1 stated that whereas visual arts educators have adopted some of the language used, "particularly with respect to 'fostering problem solving and other higher order thinking skills,' they (often unknowingly) have not incorporated these features into their curriculum materials in any systematic way." Further, P1 noted that many art teachers and researchers are unable to tell whether or not they have succeeded in developing systematic art curricula, and that this "says a lot about the difficulties faced by curriculum reformers" in the field.

P1 suggested that two factors thwart a systematic approach to teaching the visual arts. First, the visual nature of ideas or concepts taught constitute a language of imagery "in which . . . many artists and art educators lack fluency." The second difficulty is the abiding belief that children should learn to be self-expressive, which P1 defined as engaging in intuitive studio activities using art media where these activities are viewed as "thinking processes per se" rather than "the expression of previously acquired ideas or knowledge through visual or tactile images in such a way as to 'construct meaning.'" Further, "the intentional construction of meaning is a definition of artistic expression, in contrast to self-expression." P1 felt that the Center's key features not only reflected P1's own stance and work but that these also reflected the interests of the discipline-based art education (DBAE) reform movement in the United States.

P1 suggested that the key features identified by the Center were more discipline-based than studio-centered because of the major differences between objectives and, therefore, posited what would be the likely outcomes in terms of students' learning and artwork produced.

The educational goal of self-expression mandates different teaching objectives and learner outcomes for each individual, which may be quickly verified by observing the artwork produced in class. Differences in both media use and imagery become objectives in themselves. Traditional studio art instruction in elementary schools
emphasizes technical mastery of artistic media; choice of imagery is considered each child's artistic prerogative, and off limits to teacher modification. The self-expressive, studio-centered, intuitive approach therefore lends itself to instruction that provides more breadth than depth..., and that often lacks conceptual focus unless provided by the learner.

It isn't that studio-centered art production should be eliminated or diminished in favor of disciplined-based instruction, according to P1. Discipline-based instruction relies heavily on students' manipulating images and making art. However, "the critical dilemma for most art educators... is to decide how much to teach and how much to leave to the discretion of the learner." P1 said that art images express meaning through a particular configuration of aesthetic properties or visual concepts that must be taught if they are to be understood. Teaching children to read visual images as they do stories expands their expressive options when they use art media. The making of artwork or tutored images may become a problem-solving activity.

P1 suggested an additional important feature of ideal art curricula: the idea of sequencing should be considered. P1 suggested three kinds of sequencing that appear to affect learning: (1) simple to complex (task difficulty), (2) young to old (learner development), and (3) naive to sophisticated (learner acquisition). Task difficulty can and should be varied within a curriculum to correspond to developmental readiness "in order to produce more knowledgeable students," according to P1. "The purpose of sequencing task difficulty is to move students toward the goal of adult understanding of and skills in the visual arts at a level commensurate with their abilities in other subjects taught in general education."

Whereas P1 seemed concerned that sequencing be included as a desirable feature of an ideal curriculum, some interesting questions and contradictions arose when P1 later set up a sample lesson plan for Goal #1 (sample lesson to follow). After reading P1's statement below, one might ask, What is art content,
and how is this the same or different from those other matters, characteristics, or concerns mentioned below?

When using a curriculum designed to teach knowledge and skills in the visual arts, any distinctions between second and fifth grades would seem to lie in the realm of information processing, muscle control, and perceptual abilities of students rather than in curriculum content. In art, the concepts taught to kindergarteners and college students are often the same, depending only on the amount of prior experience of the students. The manner of presentation or pacing of lessons to second graders may vary from those taught to fifth graders because of the developmental factors listed above. I have seen the material on contour drawing [included in report] taught at the kindergarten, fifth grade, and college levels with good results. To judge the accuracy of this statement, it would be necessary to see the artwork produced during those lessons and compare it with imagery "typical" for the age level; the lesson plan itself would look the same for all three groups. The key to effective visual analysis is linking vocabulary words with images, whatever the method used: vocabulary words written on flash cards, on the chalk board, in typewritten (photocopied) handouts, or spoken orally; images that are real art, color reproductions, color slides, or book illustrations; student responses that are oral or written. The instructional plan included can be a lesson plan for adults, and would more likely be a unit plan (several related lessons) for either second or fifth graders. (italics added)

As with those arguments proffered by music experts (May, 1990), P1 does not address the issue of repetition or redundancy when sequencing art concepts over time, nor are students' chance or multiple encounters with these concepts considered in any critical manner. How many times must we learn about "contour lines" or warm and cool colors, for example, and does it matter how much or how often? P1's argument that we should pay attention to students' prior knowledge is commendable, but then the generative question is: How should we access students' prior knowledge? How do we determine the "amount" they have, and can we ever determine this? What kind of prior knowledge, or does this matter? How do we then assess students' prior knowledge in ways that will inform our planning and teaching? These questions are left unanswered.
Therefore, if attention is not paid to the question of students' prior knowledge as well as to sequencing, there is a greater risk for repetition, redundancy, and shallow treatment of isolated art concepts than would be desirable in a curriculum designed to develop students' understanding.

Professors' Responses to the Goals

As requested by the Center, for each goal presented, P1 dutifully listed central understandings and generalizations that should be developed under each of the three goals, listed the relationships among these central understandings, and pointed out how then best to organize these key understandings for presentation to students. P2, however, qualified and reconstructed the task by viewing the purpose of art education in a more comprehensive, integrated way with the following explanation:

I would like to propose a departure from your statement of goals. The goals you have outlined certainly have merit, however, I tend to think of them in terms that contradict your aim to advance "meaningfully understood, integrated, and applicable learning." I have been wrestling with this problem myself for some time and have come to the conclusion that it makes more sense to promote a single goal of art education.

P2's single goal of visual arts education reads as follows:

The purpose of art education is to foster student understanding of works of art. It is through understanding works of art that students can acquire knowledge of making, responding to, and thinking about art. Appreciation is a byproduct of that understanding.

While P2 felt this goal was consistent with what the Center proposed, the breadth versus depth issue was approached "somewhat differently. My bias is to push for depth by building units of instruction around exemplary works of art." P2 called this an "art-centered curriculum." By this, P2 meant that emphasis is given to fostering student understanding of the shared public meanings of art through inquiry that focuses on selected artworks in relevant contexts. These contexts provide a means of
relating students' personal viewpoints to broader frames of reference, i.e. an examination of individual differences within global perspectives as they change over time.

P2 saw this contextual framework as a continuum, with approaches to studying art organized around modes of art inquiry. See Figure 1 below.

Figure 1. P2's contextual framework and continuum for "an art-centered curriculum" based on one central goal: inquiry focused on selected artworks in relevant contexts.

While P2 reorganized the three goals into one central, integrated goal, P1 addressed the goals, "big ideas," and task quite literally and in linear fashion. Thus, P2 may seem underrepresented in the discussions that follow under each goal since P2 did not address each goal singularly. However, I will return periodically to P2's responses above, to explanations P2 presented elsewhere in the task, and to sample lesson plans to illuminate further his or her conceptualization of goals, big ideas, related concepts, and how best to present these to students. At the end of this section, I will compare, contrast, and summarize the views of P1 and P2 concerning what an ideal art curriculum is and requires.
Goal #1

Goal 1 was to develop an understanding of how art elements and principles of design (lines, shape, color, etc.) are selected, organized, and presented by artists with expressive intent or to communicate meaning. The experts were asked, what important understandings or generalizations should be developed if this goal is to be accomplished?

P1 generated the following four big ideas or understandings that should be addressed in order to achieve the above goal concerning art elements and principles of design:

Real-world or art images contain four kinds of aesthetic properties or visual concepts: sensory (art elements), formal (principles of design), expressive (meaning), and technical (craft).

Aesthetic properties or visual concepts can be observed in completed artwork, named, and manipulated in artwork in progress.

Aesthetic properties or visual concepts are independent of subject matter, historical referents, or critical value judgments.

Aesthetic properties or visual concepts to be taught in an art lesson constitute a visual vocabulary for students; when names are attached, they constitute a verbal vocabulary as well.

How did the university experts explain the relationships among these big ideas, central understandings, or generalizations under Goal #1? For example, do all the key ideas fit together into a single network? Are two or more of these ideas linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension?

P1 suggested that the recognition of aesthetic properties or visual concepts is essential both to viewing and making art. P1 also stated that the relevant attributes of aesthetic properties or visual concepts must be learned before students can apply them in making a visual image. In some ways, this
relationship both supports and conflicts with many art educators' claim that students often intuitively understand more than they can physically produce or demonstrate in their artwork: for example, recognizing that the proportion or perspective in one's drawing doesn't "look right", but not knowing how to revise or produce the results desired. Developmentalists would say that this is universally the case for all students as they near the ages of 9 or 10 and favor realistic representation. Other art educators would argue that such an interest is neither developmentally nor universally true across cultures. Such concerns are learned, implicitly or otherwise, a strong effect of living in a particular context and learning what is valued in one's group, culture, or society (May, 1989).

Further, P1's argument doesn't explain how some students can achieve fairly sophisticated expressive results without being able to explain verbally how or why they accomplished what they did (perhaps to the satisfaction of an art educator in terms of vocabulary, stated principles, or aesthetic/critical discourse). P1's argument rests on tutored learning or images; that is, in order for students to be able to apply their knowledge in thoughtful ways, or to know of choices so they can establish artistic goals and make decisions, students must first understand visual concepts and how to manipulate these toward desired ends. Finally, P1 believed that relevant attributes of aesthetic properties or visual concepts must be learned before students can apply them in making critical judgments about artwork. As in making art or producing desired results, students are in little position to make informed judgments or to engage in critical discourse without the necessary vocabulary and an understanding of art concepts inherent in works of art that can be manipulated.

In sum, P1 views art elements and the principles of design as a kind of universal vocabulary and value-free feature of all artworks, no matter who made them, their contexts, purposes, and/or uses. These visual elements or properties
exist in all artworks and can be discerned by all, no matter the subject matter portrayed; the social, cultural, or historical contexts of the artists, artworks, or viewers; and no matter what people may value as good, beautiful, or successful. For example, a line is a line, a shape is a shape, red is red, a foreground is always related somehow to a background. Visual qualities and properties of artworks are there for the viewing and learning, inside the artworks, independent of anything else.

Therefore, it seems that P1's first generalization contradicts the other three. The four kinds of aesthetic properties P1 named in the first generalization were sensory (art elements), formal (principles of design), expressive (meaning), and technical (craft). If real-world or art images also contain expressive properties (meaning) and technical ones (craft), these kinds of understandings rely on context(s) and require value judgments. Further, it is difficult to understand how all "real-world images" (e.g., something observed in the natural environment that possesses visual qualities or can be viewed as visually interesting) can possess technical properties or craft.

For example, a tree or sunset does not craft itself, nor is it crafted with technical skill. Crafting requires a being's purpose, intervention, and action. I say "being" instead of "human" because some animals are quite skillful in crafting objects or their environment for shelter, attracting mates, and survival of their species. Some bird species, for example, collect colorful shells, shiny reflective stones, feathers, twigs, and other natural objects and arrange these materials in a circle on prepared grassy ground near brush or thickets to attract mates. Courtship dances then occur inside this constructed circle. Whatever expressive qualities that either real-world or art images might possess or suggest to the creator or viewer, then, are open to interpretation. Thus, it would seem that aesthetic properties are not universal; that is, context-free, value-free, or
understood in the same way by all people. For example, the color red may be red, but it also can symbolize, convey, or connote very different meanings in different cultures and in different times.

**How would art experts organize and present to students the key ideas they generated under Goal #1?** Two understandings or generalizations were offered by P1. First, aesthetic properties designated as lesson objectives must be visible in real-world or artistic images to both teacher and student in order for teaching to take place. In other words, these properties must be obvious and not subtle. P1 implies that teachers may not be skillful in discerning these properties unless these are obvious to them as well. Second, the same aesthetic properties can and should be observed in more than one real-world image or artwork. Thus, in any given lesson, there should be more than one instance or example of an image that has these particular properties in common. Also, using multiple examples provides an opportunity for students to compare and contrast how these same visual elements or properties can be treated or expressed in variable ways.

P1 provides the following rationale for designing and organizing the "visual analysis" portion in a sample lesson plan, a lesson segment that most noticeably corresponds to Goal #1 or the study of visual elements, properties, and principles.

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**Goal [1] corresponds to the portion of an art lesson called Visual Analysis [or visual scanning] in DBAE [discipline-based art education]. . . . During Visual Analysis, children learn art vocabulary words that designate aesthetic properties or visual concepts by analyzing real-world or art images for their aesthetic properties or visual concepts. Learning these visual concepts prepares children to construct images that contain the same properties or concepts during the Art Production portion of the lesson and, upon completion, to identify these properties or concepts in their own images and in the images made by other children. During the Critical Analysis portion of the lesson, children identify the same properties or concepts in images made by adult artists. (During Historical Analysis, children place the same art objects into a cultural and historical context. This activity requires the learning of additional concepts, some of which may be visual—those that define**
style, for example—and some verbal, facts related to the artist’s life and times.)

On P1’s sample lesson plan there are three primary objectives. (See Figure 2, a format adapted from one used by Western Australian College of Advanced Education, Mount Lawley, W.A., Australia.) One objective relates to "visual analysis" or having students identify contours, lines, shapes, overlapping, proportion, and space. The second objective is "art production" where students will use pencils to make contour line drawings of a shoe while studying kinds of lines, qualities of lines, expressive lines, overlapping shapes, and large, medium, and small shapes. The third objective relates to "critical/historical analysis" where students should be able to identify and discuss the new art concepts when viewing selected reproductions of adult’s line drawings (Matisse, Kuhn, Kanemitus, Picasso, etc.)

P1’s visual analysis or "aesthetic scanning" is a process of perceiving and responding to artworks along the visual properties listed previously (sensory, formal, expressive, and technical) and as a key understanding to develop under Goal #1. "Aesthetic scanning" is derived from the work of Broudy (1981) and Broudy and Silverman (1985), who are connected with DBAE and the Getty Institute for the Arts in Los Angeles. In scanning, P1 states, "the viewer of an artwork locates and identifies its aesthetic properties. Scanning is a classroom application of the perceptual activity that artists use when making art, and that connoisseurs use when contemplating it" (Co-author & P1, 1987, p. 41).

In P1’s sample lesson plan, visual analysis involves learning vocabulary words with respect to contour, line, shape, space, and contrast through teacher demonstration and the showing and discussion of exemplars ("vocabulary images," such as a line drawing, photographs of shoes, a contour line drawing by Lachaise, and a diagram of overlapping shoes). In the presentation or
TOPIC: TORN AND CUT PAPER--INVENTING A LANDSCAPE

GRADE: Second Grade/Fifth Grade/Adult

OVERVIEW (TEACHER'S INTENTION): Children/adults will tear and cut colored paper to compose an imaginary landscape with irregular and geometric shapes.

LEARNING OBJECTIVES:

VISUAL ANALYSIS

On completing this lesson each child/adult will be able to

- Identify a landscape's Foreground, middle-ground, background
- Irregular shapes
- Geometric shapes
- Proportion
- Overlapping

ART PRODUCTION

- Use paper to make Torn shapes
- Cut shapes
- Irregular shapes
- Geometric shapes
- Use scissors well
- Paste securely

CRITICAL/HISTORICAL ANALYSIS

- Identify art concepts in landscapes by Tao-Chi
- Altdorfer
- Lorrain
- Gauguin
- Rousseau

VISUAL ANALYSIS:

VOCABULARY WORDS: (see Demonstration, below)

<table>
<thead>
<tr>
<th>Landscape</th>
<th>Foreground</th>
<th>Middle ground</th>
<th>Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shapes</td>
<td>Irregular</td>
<td>Geometric</td>
<td>Ornamental</td>
</tr>
</tbody>
</table>

- Tear
- Cut
- Paste
- Secure
- Proportion
- One-third
- Two-thirds
- Space
- Depth
- Horizon
- Details
- Repetition
- Variation

VOCABULARY IMAGES:

- Photographs of landscapes, showing fore-, middle, and background; grass, mountains, lakes, and clouds.
- Photographs of topiary art, trees trimmed into ornamental (geometric) shapes.

ART PRODUCTION:

MATERIALS:

- Blue, brown, green, white construction paper
- Scissors, crayons
- Paste, paper towels

Figure 2. P1's sample lesson plan for studying the elements of design.

21 26
DEMONSTRATION: The teacher uses materials described above to

1. Review pasting techniques; review cutting rounded irregular shapes.
2. Tear brown sheet of paper lengthwise to look like mountains; paste onto light blue paper that represents sky.
3. Tear slowly toward yourself with one hand; use other hand as anchor.
4. Tear green paper lengthwise to represent grass; cut out white clouds and blue lake; paste onto paper.
5. Draw circles, triangles, rectangles, and half-circles in varying sizes on green and brown paper; cut out.
6. Make trees by overlapping geometric shapes; arrange on picture; paste down.

CLASS ACTIVITY:

Children/adults use prescribed art materials (see Materials, above) to make an image that will display the characteristics listed in Evaluation of Artwork (see below).

EVALUATION OF ARTWORK:

Each child/adult makes an image of a landscape that will contain:

1. Torn shapes form recognizable mountain peaks and grassy ground.
2. Mountains cover about two-thirds the height of the picture; grass covers between one-third and one-fourth the height of the picture.
3. Clouds and water are rounded irregular shapes.
4. Tree shapes are recognizable circles, triangles, rectangles, and half-circles; treetops overlap tree trunks.
5. Trees have been distributed throughout ground area.
6. All shapes are securely pasted.

CRITICAL/HISTORICAL ANALYSIS:

ART IMAGES:

Landslapes by Tao-Chi, Altdorfer, Lorrain, Gauguin, Rousseau.

ART INFORMATION:

1. Artists' names, countries, titles of works, dates, media (see above).
2. Artists' career information, source of ideas, expressive properties of art work.

Note: This lesson is adapted from the SWEL Elementary Art Program (1982), Block 2, Unit 3, Activities 1 and 2. The lesson plan format is adapted from a form used at Western Australian College of Advanced Education, Mount Lawley, W.A., Australia, 1985.
demonstration segment of the lesson, one see the kinds of properties of lines that will be attended to in a question-discussion period. The criteria for evaluating the completed artwork is introduced to students before they engage in the drawing activity (see lesson segment, "Evaluation of Artwork"). In the critical/historical component of the lesson, famous adult exemplars of the use of line are shown, but exactly in what way these are to be discussed or used with students is unclear in the lesson plan. One gets a better sense of how this might occur from a published article, co-authored and submitted by P1 (Co-author & PI, 1987).

In aesthetic scanning, no matter its specific location in a lesson, P1 states that there are “two kinds of questions a teacher would be asking: those that ask for information about a new topic (Initiating Questions) and those that probe further into the same topic (Continuing Questions)” (Co-author & P1, 1987, p. 42). Further, there are different categories and varieties of questions within each set of questions. Under "Initiating Questions," P1 states that “some of these kinds of questions are easier to answer than others, depending on how many clues each holds to the correct answer” (p. 42). Other assumptions are that "teachers should ask easier questions first," that this strategy "builds [students’] confidence and vocabulary," and that as children become accustomed to looking at artwork and talking about their aesthetic properties, "they will give longer, more detailed descriptions of them" (p. 42). Table 1 illustrates how P1 categorized initiating questions in their presumed order of difficulty and to which aesthetic properties each kind of question is associated, with sample questions.
Table 1

P1's Chart of "Initiating Questions" to Engage Students in Visual Analysis*

<table>
<thead>
<tr>
<th>Kind of Question</th>
<th>Aesthetic Properties</th>
<th>Sample Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Agreement, Disagreement)</td>
<td>Sensory, Formal, Expressive, Technical</td>
<td>This painting has a lot of red, doesn't it?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The balance in this fabric pattern is symmetrical, isn't it?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Don't you agree that the smooth shapes in this sculpture convey a feeling of peace?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>You can feel how rough the surface texture of this pot is, can't you?</td>
</tr>
<tr>
<td>Selective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Choice)</td>
<td>Sensory, Formal, Expressive, Technical</td>
<td>Do you see more red or blue in this painting?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is this balance symmetrical or asymmetrical?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do the shapes make you feel peaceful or upset?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is the surface texture rough or smooth?</td>
</tr>
<tr>
<td>Parallel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Additional Information)</td>
<td>Sensory, Formal, Expressive, Technical</td>
<td>What other colors are there in this painting besides red?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Is there any kind of balance here other than symmetrical?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What else might these smooth shapes suggest?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are there more surfaces on this clay piece than the rough ones?</td>
</tr>
<tr>
<td>Constructive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Specific New Information)</td>
<td>Sensory, Formal, Expressive, Technical</td>
<td>What colors can you find in this painting?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What kind of balance do you see here?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What kinds of shapes can you find in this sculpture, and what mood do they evoke?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How has the artist treated the surface of this clay pot?</td>
</tr>
<tr>
<td>Productive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(General New Information)</td>
<td>Sensory, Formal, Expressive, Technical</td>
<td>How would you describe one of the painting's sensory properties?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can you describe one of the formal properties in this fabric pattern?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What does this sculpture express?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What medium and techniques did the artist use in constructing this pot?</td>
</tr>
</tbody>
</table>

* Initiating questions are presented in order of how difficult they are to answer, according to P1.
According to P1, "Continuing Questions" encourage students to pursue a line of thought while looking at an artwork. "Continuing Questions serve five different functions: to redirect, to rephrase, to prompt, to clarify, and to elaborate the child's initial response" (Co-author & P2, 1987, p. 42). Table 2 below illustrates sample Continuing Questions.

Table 2

P1's Chart of "Continuing Questions" Arranged According to Their Function

<table>
<thead>
<tr>
<th>Kind of Question</th>
<th>Sample Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redirect</td>
<td>Right! Would anyone else like to add to that answer? Does anyone else have a comment? Any others?</td>
</tr>
<tr>
<td>Rephrase</td>
<td>Your answer wasn't clear--can you rephrase it? I don't think you understood my question--I'm asking you to explain the... Can you state your answer another way?</td>
</tr>
<tr>
<td>Prompt</td>
<td>You're not answering my question--why don't you try again? You're on the right track--can you keep going? Have you left anything out?</td>
</tr>
<tr>
<td>Clarify</td>
<td>Can you tell me your answer more clearly? Can you explain yourself further? Can you help me understand your point better?</td>
</tr>
<tr>
<td>Elaborate</td>
<td>What can you add to that? Can you tell me more? What else?</td>
</tr>
</tbody>
</table>

Given the sample questions presented above in Table 2, one could argue that the categories of Continuing Questions are not mutually exclusive. For example, "Your answer wasn't clear--can you rephrase it?" (under rephrase) is a request for clarity. Under the category "Prompt," questions such as "You're on the right
track—can you *keep going?*" or "Have you left anything out?" are requests for *elaboration,* which are not simply prompts but requests for elaboration (identified as "elaborate," a different category). Likewise, one could say that "Can you explain yourself *further?" is a request for elaboration and not simply clarification. Thus, P1's system of categorizing questions leaves much to be desired and is neither very logical nor illuminating.

P1 does suggest to teachers that they pause before asking questions and that they provide adequate wait time for students to respond to questions thoughtfully. Another suggestion, to encourage full participation, is to ask several students to respond to a given question "to demonstrate that many questions have multiple answers" (Co-author & P1, 1987, p. 43). Also, it is suggested that teachers "involve less verbal children by asking them questions that are narrow in focus or require shorter answers; then prompt these same children to extend their answers" (p. 43). Finally, P1 suggests that good questioning strategies are important for meaningful classroom discourse, quite apart from any art curriculum per se. "Teachers should use questioning selectively to structure classroom talk about art. Teachers can modify, amend, change, or rearrange kinds of questions to fit their goals" (p. 43). Questions presented in this article were not to be followed mechanically nor methodically. To P1, "such educated encounters with art is one identifying characteristic of serious art study and is central to producing significant art learning" (p. 43).

Since P2 reframed all three goals into one large, encompassing goal for art education, then what understandings, key ideas, or conceptual relationships are to be presented to students and studied? Given the contextual framework and continuum presented earlier, P2 stated that approaches to studying art are organized around "modes of art inquiry." Also paralleling DBAE's four disciplinary content areas (like P1's interest in art production or studio,
aesthetics, criticism, and history), P2 suggested the following modes of art inquiry:

1. **Studio**--activities that involve students in:
   a. determining how artists use media to express meanings;
   b. making informed judgments about the quality of execution.

2. **Criticism**--activities that involve students in:
   a. detecting, through description and interpretation, the interplay of an artwork's formal properties and meanings;
   b. arriving at informed judgments about the aesthetic value of an artwork.

3. **History**--activities that involve students in:
   a. reconstructing socio-cultural contexts in which the meanings of art were produced and are to be interpreted;
   b. making informed judgments about the historical significance of artwork.

4. **Aesthetics**--activities that involve students in:
   a. considering the nature of art and its functions;
   b. determining criteria for making informed judgments about art.

Recall that Pi saw art education's primary goal as fostering student understanding of "the shared, public meanings of art through inquiry that focuses on selected artworks in relevant contexts. These contexts provide a means of relating students' personal viewpoints to broader frames of reference."

P1 and P2 are similar in their desire to focus students' primary attention on selected artworks as an organizing center for artistic discourse and studio activities. They also agree in terms of viewing visual elements and design principles as tightly connected to and interrelated with other aspects of art knowledge (studio, criticism, history, aesthetics). Both downplay studio or art production, viewing this as a mere vehicle to situate or learn the other disciplines in art. Studying or understanding the elements of design should not be divorced from these other important dimensions of art. Both professors attended to the learner's point of view—or their "prior knowledge" (P1), but P2 makes the knowledge and experiences students bring to artistic encounters an important,
explicit part of the equation in the overarching goal generated and the continuum and contextual framework presented earlier.

Both P1 and P2 attend to learning art in diverse contexts or with different lenses, but in dissimilar ways. For example, there is no explicit attention to accessing students' prior knowledge in P1's lesson, and the critical/historical analysis segment in P1's sample lesson seems divorced from the main ideas or task at hand, and is quite shallow. With little other information to go on, the additional artworks seem like they would be treated as a tag-on activity with an emphasis primarily on reviewing and reinforcing the elements of design or visual vocabulary and providing yet more exemplars of lines in art after students have created their own line drawings. Given the "art information" under this lesson segment, it seems that there would be little attention or time devoted to critical discussion of these works in critical/historical context. Most of the items in this category focus on low-level facts like names, dates, titles of the drawings, and so forth. But perhaps this is merely a matter of figure-ground. Goal #1 is focused primarily on the elements of design. P1's lesson plan features this objective, and all else becomes the ground, however related.

P2's modes of inquiry represent a "developmental model that acknowledges the expertise of artists, art critics, art historians, and philosophers of art." The intent is not to make students into little artists, critics, historians, or philosophers, P2 claimed. Rather, the goal of the curriculum is "designed to introduce students to concepts and strategies used by these experts to explore questions about art." Drawing on Glaser (1988), P2 recommended that students acquire expert knowledge of two kinds from each of the above four areas of inquiry: conceptual knowledge, or the acquisition of domain-specific information; and procedural knowledge, the development of "knowledge-organizing-knowledge" (executive processes).
P2 also suggested that there is evidence that conceptual and procedural knowledge are closely related, drawing on the work of Bransford, Sherwood, Vye, and Rieser (1986). Competencies in a domain and the ability to think about that domain seem to develop hand in hand; thinking abilities are not simply added on top of existing domain-specific competencies. For example, thinking or tasks that require inferencing, organizing, conserving, and decentrating are closely related to domain-specific knowledge (e.g., in art). According to this argument, then, inferencing in art would differ significantly from inferencing in mathematics because inferencing in either case requires domain-specific knowledge.

One might refer back to P1's list of "initiating" and "continuing questions" in Tables 1 and 2 and reassess how such questions would foster higher level thinking or the development of conceptual/procedural knowledge in tandem with developing students' expertise. Or, one might refer to the verbs presented in lesson objectives (e.g. "identify"). I would argue that P1's lesson objectives, categories, and sample questions severely miss the mark, even though they are related and rely on domain-specific art knowledge of visual properties. P1 and P2 seem to have very different notions about what counts as a worthwhile question or issue to pursue in art. Another question that arises, even in P2's scheme of things, is what would make inferencing in history and art history, or literary criticism and art criticism so remarkably distinct? While there is obvious domain specificity here given the objects of study, there are other matters about the purposes, "doing" of history or criticism, and the products generated that would seem to be quite similar across these domains.

Both P1 and P2 suggested that the four domains of art are not neatly bounded, isolated categories. P1 suggested this in the sample lesson plan, given the inclusion of all these domains no matter the primary goal or objectives of the lesson. However, the lesson-plan category "Overview (Teacher's Intention)"
subverts integration because the primary focus is on what students will make in the lesson.

P2 was much more explicit and detailed about how one might go about integrating these domains within the visual arts discipline. First, P2 believed that issues in art should be examined through reference to comparative exemplars. (P1 supported this, too.) However, P2 used studio activities to complement concepts in criticism, history, and aesthetics. (See Figure 3.) Studio activities are made subservient to comparative analyses within or across the domains of criticism, history, and/or aesthetics. "This means that any single lesson might focus on criticism/studio, history/studio, or aesthetics/studio."

Further, P2 added, "In the real world criticism, history, and aesthetic concepts may also overlap. Those relationships are brought to light in the present curriculum by building an entire unit of instruction around a single 'key artwork.'" Then, other works of art or "comparative exemplars" are introduced in relation to that key artwork and the concepts or understandings one is attempting to help students develop. The graphic representation or organization of information alone in Figure 3 illustrates P2's primary interests or values. Given the numerous examples generated under history, one also might surmise that art history is P2's primary interest or forte. Also, rhetorical devices such as the second-hand positioning of the word "studio" in equations like criticism/studio or history/studio reveal P2's strong commitment to emphasizing what can be learned in art besides how to make a pinchpot.

Finally, P1 tends to isolate visual properties into single categories such as "sensual," "formal," or "expressive." P1 also suggested that there are correct answers in initiating questions, and many of the sample questions presented in
**Criticisms**

Activities that involve students in contextual examination of artworks:

- a. detecting, through description and interpretation, the interplay of their formal properties and meanings;
- b. arriving at informed judgments about their aesthetic value.

**Comparative Focus**

Media to meanings:
- 2D media to 3D media effects on meanings
- Photo to painting effects on meanings
- etc.

Surface/edge qualities to meaning:
- Linear to painterly effects on meanings
- Simplification to detail on meanings
- etc.

Color to meaning:
- Subdued to vibrant color effects on meanings
- etc.

Illumination to meaning:
- Focused to soft lighting effects on meanings
- etc.

Perspective to meaning:
- a. serial to ground level viewpoint to meanings
- b. single to multiple viewpoints to meanings
- etc.

Subject to meaning:
- a. same subject to different expressive meanings
- b. same expressive meanings to different subject
- etc.

Contrast to meaning:
- a. verbal context to interpretation of meanings
- b. environmental context to interpretation of meanings
- c. pictorial context to interpretation of meanings
- etc.

**History**

Activities that involve students in:

- a. reconstructing socio-cultural contexts in which the meanings of art were produced and are to be interpreted;
- b. making informed judgments about the historical significance of artwork.

**Comparative Focus**

Before and after to meanings:
- Artist to same artist in expression of meanings
- Artist to earlier artists in expression of meanings
- Artist to later artists in expression of meanings
- Art movement to same movement in expression of meanings
- Art movement to earlier movement in expression of meanings
- Art movement to later movement in expression of meanings
- Historical period to same period in expression of meanings
- Historical period to earlier period in expression of meanings
- Historical period to later period in expression of meanings
- Stylistic tradition to same style in expression of meanings
- Stylistic tradition to earlier styles in expression of meanings
- Stylistic tradition to later styles in expression of meanings
- Cultural context to same culture in expression of meanings
- Cultural context to earlier culture in expression of meanings
- Cultural context to later culture in expression of meanings
- American to European art in expression of meanings
- American to mainstream art in expression of meanings
- Native to mainland art in expression of meanings
- Artwork to artwork influenced by artwork in expression of meanings
- Artwork to art influenced by art in expression of meanings
- Historical art to historical (naive) art in expression of meanings
- etc.

**Aesthetics**

Activities that involve students in:

- a. considering the nature of art and its functions;
- b. determining criteria for making informed judgments about art.

**Comparative Focus**

Aesthetic theory to meanings:
- a. Art objects to natural objects in expression of meanings
- b. Beauty to ugliness represented in the expression of meanings
- c. Original artwork to forgeries in expression of meanings
- d. Fine art to popular art in expression of meanings
- e. Fine art to propaganda as art in expression of meanings
- f. Artist intentions to absence of artist intentions in the interpretation of meanings
- g. Universal to cultural meanings
- etc.

**Studio**

Activities that involve students in:

- a. determining how artists use media to express meanings;
- b. making informed judgments about the quality of execution.
Table 1 would require mostly identification, recall, yes-no responses, and single utterances with little description or explanation pursued. P1's "continuing questions" are a conceptual quagmire, ill-conceived, and provide little guidance to practitioners. P2, however, makes matters much more interesting and complex by using a comparative focus in the first place, which always has "meanings" as part of each conceptual equation; for example, "2D media to 3D media effects on meanings" or "fine art to popular art in expression of meanings." Thus, what is apt to occur using P2's comparative framework is meaning-making, not only higher level thinking but connected, contextualized ways of thinking about and understanding art in some depth. This comparative framework requires something far more than identification, description, and recall from students as well as their teacher!

Further, P2 does not assume the same thing that P1 does in terms of what students may possess or need as "prior knowledge" in order to learn art in this more meaningful, sophisticated way. P1 focused considerably on visual properties, elements, and isolated vocabulary words, attending little if at all to motivation or developing students' dispositions. However, P2 suggested that unless information is made meaningful to students, they are not likely to learn it.

Even if the information is comprehended, it is not likely to be used because students often fail to see its relevancy. Art teachers need to recognize that "some ways of imparting information result in knowledge representations that are not especially accessible" (Branford, et al., 1986, p. 1080). Therefore, it is essential that teachers design learning activities to help students grasp the usefulness of examining the information under study. This can happen in art classrooms if teachers lead students to compare what they know with what they don't know.

P2 suggested that the use of comparative exemplars provides students with "the opportunity to compare and contrast their own ideas to those ideas conveyed by others through art." Therefore, the purpose of comparative exemplars is not to
focus simply on the likenesses and differences among artworks, distancing students further from their own ideas and experiences. "If successfully implemented, this approach should lead students to raise their own questions about art." P1 did not speak much about developing students' positive dispositions or promoting their questions in art. P1 spoke more about students' responses with the right vocabulary, and then of the sort that would be elicited from rather low-level, unprovocative questions.

Whereas both P1 and P2 claimed to be "constructivists" and proponents of DBAE (or at least a discipline-based approach to the study of art), P2 proposed that existing models of art inquiry (e.g., criticism, history, and aesthetics) offer useful conceptual frameworks for organizing cognitive strategies. While this view is consistent with DBAE, P2 said, "I haven't heard anyone talk about DBAE in these terms." The comparative approach P2 proposed is based on "a specific theoretical view of learning: a cognitive-constructivist view of cognition."

While DBAE appears to follow the same theoretical orientation, I cannot be sure. A review of the literature leaves me somewhat puzzled about this. . . . One important difference in my mind is that DBAE tends to separate the "disciplines." I favor drawing connections across areas of art inquiry.

P2 submitted two sample lesson plans, one focusing on art history and one on art criticism, developed for 9-12 year olds, although P2 suggested that these plans "can be easily generalized to younger elementary-aged students." The lessons plans actually were written by one of P2's preservice students who had prepared an entire unit on one key artwork, Vincent van Gogh's "Starry Night." P2 suggested, "I think you can get a good sense of how I prefer to see the 'depth vs. breadth' issue treated." Overall, P2 was pleased with these lessons. Even though, "they are not perfect, . . . they do give you a good idea of how this curriculum approach might be put into practice."
Because of their length (one is 34 pages), and rather than turn to a detailed analysis of these lessons at this point, I will refer to these later. (See figures that follow for pertinent pages drawn from these lesson plans.) What is important here, no matter the goal or lesson under discussion, is to understand what P2 requires in a lesson and how these requirements link explicitly to the "comparative exemplars" framework presented earlier (refer back to Figure 3).

P2's handout to preservice teachers includes a copy of this framework as well as definitions, explanations, and expectations concerning each component and term used in the abbreviated lesson plan format. (See Figure 4.) This short form is deceptive in terms of the amount of understanding and information that is actually required of the teacher. For example, "Lesson Focus" is presented as follows:

Comparative exemplars are works of art used in comparing and contrasting qualities of a key artwork in lessons with a criticism/studio focus, a history/studio focus, or an aesthetics/studio focus. As this suggests, each lesson is to include a studio component that complements selected concepts in criticism, history, or aesthetics as it relates to the key artwork and its comparative exemplars.

"Comparative Focus" in the handout on lesson planning is explained as follows:

The selection of comparative exemplars must be linked to the stated lesson focus and to a specific comparative focus. For example, in a criticism/studio lesson, the use of different illumination treatments (e.g., focused vs. soft lighting) might be examined to determine their effect on the interpretation of expressive meanings. In this case, artworks would be selected as comparative exemplars to serve as examples of these illumination treatments as they compare and contrast with treatments used in the key artwork.

In this section, preservice teachers also are told that it is "very important to include artworks by male and female artists and to represent mainstream and
A.E. LESSON PLAN FORMAT

>>> AGE/GRADE LEVEL OF STUDENTS:
>>> CLASS TIME:
>>> LESSON FOCUS: (state as: criticism/studio, history/studio, or aesthetics/studio)
>>> KEY ARTWORK: (state: title, artist, date, media, country)
>>> COMPARATIVE FOCUS;
>>> COMPARATIVE EXEMPLARS: (state: title, artist, date, media, country)

>>> STUDENT HANDOUTS:
>>> OTHER INSTRUCTIONAL SUPPORT MATERIALS:
>>> SUPPLIES:
>>> EQUIPMENT:
>>> CLASSROOM ARRANGEMENTS: (diagram work space, activity centers, resource centers, etc.)

>>> STORAGE OF STUDENT WORK:
>>> LESSON OBJECTIVES:
>>> EVALUATION STRATEGIES:
>>> VOCABULARY:

<table>
<thead>
<tr>
<th>TIME EST</th>
<th>MOTIVATING ACTIVITIES</th>
<th>LEARNING ACTIVITIES</th>
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>>> CLEAN-UP ACTIVITIES
>>> SUPPLEMENTARY ACTIVITIES

*Figure 4. P2's abbreviated lesson plan format.*
minority art from a wide range of cultures." Moreover, P2 requires teachers to "select art with varying levels of abstraction (i.e., art that ranges from highly realistic to highly abstract)." The comparative focus of each lesson must be stated in terms of the major concepts to be studied (e.g., illumination effects [focused vs. soft lighting] on the interpretation of expressive meanings). Thus, concepts are stated more like principles than single-word terms (e.g., "lines," as was the case in P1's lesson plan).

The "Lesson Objectives" (two or three) in P2's framework must specify what comparative concepts students will learn, and how. Under "Evaluation Strategies," methods must be stipulated, and preservice teachers are told that evaluation "is not synonymous with grading" and are referred to a chapter in a book on alternative methods of evaluation. Each evaluation strategy must correspond to an objective, and a description of desired responses and criteria for assessing the quality of students' studio work must be included, as well as samples of any evaluative material to be used (tests, worksheets, games, etc.). Both P1 and P2 include "Vocabulary Words"; however, in P1's lesson plan, vocabulary words are merely listed. P2 requires "definitions that are appropriate for the age level of your students."

P2 defines "Motivating Activities" as those activities which "the teacher initiates to interest students in learning about what is planned." Thus, motivation is a key feature in P2's lessons and is clearly linked to content; whereas P1 never mentions motivating students nor accounts for this. Motivating activities for P2 are stated in terms of "the leading questions that will be used to facilitate class discussions, the key points to be presented in art viewing activities, the primary emphases in studio demonstrations, and so on." Under "Learning Activities," P2 stresses that an adequate outline of desired responses must be
included for every learning activity. So again, motivation and activities are linked clearly and directly to the objectives, art content, and/or concepts.

The above examples not only illustrate P2's effectiveness in linking lesson segments and activities explicitly to worthwhile concepts and developing students' understanding in/about art. They also demonstrate and support P2's concern that learning in art must be relevant and useful to students and that the information and activities presented to them can and should cohere in logical ways and in meaningful context. P2 states that what is essential to the success of this "art-centered curriculum" is that "teachers recognize the limitations of their personal thoughts and opinions about art."

In order to present an informed perspective, preparation for teaching requires art teachers to collect as much relevant contextual information as possible. From this pool of resource materials, teachers identify appropriate concepts that are sensitive to the age and interests of their students.

Even though P2 did not develop a specific, sample lesson plan for ways to achieve Goal #1 (developing an understanding of visual elements like line, shape, color to better understand or achieve expressive intent or outcomes), let me close this section with an example from P2's preservice teacher's lesson focused on criticism/studio in her "Starry Night" unit. The handouts in Figures 5 and 6 were disseminated to youngsters 9-12 years old before they viewed various slides of "comparative exemplars" along with the "key artwork" presented to them earlier in the lesson (van Gogh's "Starry Night"). Note several things in these handouts: how the vocabulary is treated in a way that youngsters can relate to and understand; how this information then connects to the "Helpful Hints on Criticism"; that students are invited to generate their own questions under each category, not just answers; and students are reminded that in evaluating art, they must give reasons for deciding whether the work of art is good or bad. Comparing
VOCABULARY

CRITICISM--Criticism is often mistaken to mean that something is bad, or that it has something wrong with it. This is not true. When we are talking about art criticism, we mean looking at a work of art in many ways. We do this so we can understand a work of art before we make up our mind whether it is good or not.

THERE ARE THREE STEPS IN CRITICISM: describing what you see, deciding what it means, and finally, deciding whether it is good or not.

1. Description--What does the art work look like?
2. Interpretation--What do you think the art work means?
3. Evaluation--What is good about the art work?
   What isn't good about the art work?

landscape--a picture of land, usually of hills and trees.

Figure 5. A handout for 9-12 year olds from P2's lesson in criticism/studio.

the ways in which P1 and P2 would design a lesson to achieve Goal #1 on the elements of design presents a stark contrast in terms of which group of students most likely would be motivated and engaged in learning, would learn more about art than the elements of design, and would develop conceptual understanding, critical thinking skills, and depth of knowledge as this goal relates to expressive intent, effects, and meaning-making.
Helpful Hints on Criticism

1. The first step is to describe what you see.

   What is in the art work?
   What colors do you see?
   What kinds of lines or shapes do you see?
   If it is a painting, can you see the brushstrokes in the paint?
   Does the art work seem simple or complicated or something in between?
   Does the art work have perspective?

   (These are only a few questions you might ask yourself to help describe the art work.)

2. The next step is to interpret the work of art.

   What does the work of art mean to you?
   What do you think the artist is trying to say?
   Is the artist trying to say anything at all?
   Can this work of art be related somehow to current events?
   Does the artist use colors in a special way that might mean something?

   (There are many questions you might add to the list!)

3. The third step is to evaluate.

   What is good about the work of art?
   What is not so good?
   If you thought the artist was trying to say something in the work of art, do you think they succeeded?
   Did they succeed a lot, a little, or not at all?

   (These are just a few questions.)

**One point to remember when you evaluate: you must give reasons for thinking why the work is good or bad.

Figure 6. A handout for 9-12 year olds from P2's lesson in criticism/studio.
The comparative focus of P2's lesson is "subject to meanings: same subject to different expressive meanings." The subject that guided the selection of the comparative exemplars was landscapes. P2's preservice student selected van Gogh's "Starry Night" as the key artwork with information handed out to youngsters on the artist's life, interests, expressive style, historical place, and influence. The comparative exemplars were Georgia O'Keeffe's "Stump in Red Hills," Thomas Cole's "The Oxbow," and Katsushika Hokusai's "The Waterfall at Aoi-Ga-Oka" (a polychrome woodblock print). Thus, the teacher used exemplars from different cultures using different media (paintings and a print), but all of these examples had strong expressive qualities.

Working in small groups and while viewing slides, students completed four worksheets that had the same questions. (See Figure 7.) Notice how the questions on the worksheet are open-ended (unlike P1's questions), even though they cover the same kinds of categories or "aesthetic properties," as P1 called them. Description was modeled beforehand for students, beginning with a game describing "Starry Night." The teacher had students view all the slides and complete all the descriptive questions with discussion interspersed, except for the last slide (O'Keefe's), which they were asked to do on their own. So again, the task was modeled and students' learning was scaffolded in thoughtful ways so that most students likely would experience success.

After viewing the comparative exemplars and completing the descriptive questions, the activity shifted to interpretation. The teacher had students read the handout of van Gogh's life "to interpret his painting." Students then viewed "Starry Night" again, and the teacher asked for volunteers to interpret the painting. Then students completed the interpretation portion of their workbook. Next, the other slides were viewed again so that students could complete the interpretation portion of their worksheets and discuss these.
Describe this painting...

1. What do you see? ____________________________________________________________

2. What colors are used? _________________________________________________________
   What kinds of lines do you see? ________________________________________________
   What kinds of shapes do you see? ______________________________________________
   What kind of lighting do you see? ______________________________________________
   What kind of texture do you see? _______________________________________________
   What kind of composition is used? _____________________________________________

INTERPRETATION:
1. What do you think this painting is about? _______________________________________

EVALUATION:
1. Is this a good painting? Why or Why not? _______________________________________

Figure 7. One of the worksheets from P2's critical/studio lesson.
After the above, students were told that they would be making landscapes using the formal properties they had just learned about and described. The studio portion of the lesson began with students divided into four small groups, each group having a different assignment or "name" (joyous, peaceful, beautiful, and lonely landscapes) and different media (oil pastel, torn paper, cut paper, and India ink on watercolor paper). The teacher explained that "each table has a different meaning for their landscapes," and that students "should try to use the formal properties to create that meaning in their landscapes." After the studio activity (about 20 minutes) and clean-up, the teacher had students view "Starry Night" again, and then asked them to generate (write) criteria for what makes a good painting. Then students engaged in a critique of their own work, first describing it, interpreting it, and finally evaluating it.

Here we can see considerable differences in how P1 and P2 would design a lesson and organize activities, materials, and students to achieve the goal of understanding the elements of design with expressive intent. P1's lesson appeared to be a whole-group activity, typical of most art classes. However, P2 varied the structural arrangement throughout the lesson, from whole-group, to small-group, to individual, to whole-group, small-group, and so on. P2 also varied the tasks, all of which actively involved students in learning, providing P2 with many opportunities to evaluate students' learning in situ and after the lesson: a game in the beginning, viewing, reading, discussing, writing, making art, critiquing, and so forth.

Granted, P2's lesson was 90 minutes long, longer than the time allotted for most art lessons, but much is packed into this lesson! Students will learn how to perceive and describe the elements of design and aesthetic properties in artworks, just as students will in P1's class. However, P2's students are apt to learn more about the elements of design and how these can be selected and organized with
expressive intent and power. They will learn about Van Gogh, and they will see that Van Gogh was influenced by other artists and that he influenced them in particular ways. They will learn about landscapes, particularly the kind that can express feelings and meanings more than the realistic representations with which students may be most familiar, even admire. They are apt to reconsider what makes a "good" painting and to develop new understandings about the meaning of art and its worth to artists and viewers alike. And, they will learn, implicitly perhaps, how different media and techniques can influence an artist's expressive goals and the relative success in artistic outcomes.

The building blocks, vocabulary, or language of art that so concerned P1 for Goal #1 are situated in meaningful context for P2. They are a natural, integral part of perceiving and responding to works of art and creating meanings--as well as art. P2's lesson reflects an understanding of the reflexive nature of conceptual and procedural knowledge, the kind of teaching/learning processes and context that are required to foster this sort of learning, and the kinds of dispositions that must be honored and developed if students' understanding and appreciation in/of art is to be developed further.

I have treated Goal #1 in considerable detail and at great length for two reasons. First, teaching the elements of design seems to be a pronounced feature of elementary art classes taught by specialists, and the ways in which this content typically is presented leaves much to be desired. Connections are made to students' art products and little else. There is very little serious attention given to critical thinking or to the aesthetic, critical, sociocultural, and historical dimensions of art. I wanted to demonstrate how this goal could be treated in more depth, and in more thoughtful, defensible ways. Second, it seemed appropriate to lay out P1's and P2's overarching interests and theoretical commitments early on to frame and situate their responses to Goals #2 and #3, which follow.
Goal #2

Goal #2 was to develop an understanding of the artistic process (choices, decision making, critical/creative thinking) in creating artistic forms with expressive intent (not merely to produce art objects). This goal more nearly reflects an interest in art production or studio art, traditional fare in art class activities. However, there is explicit interest in what kinds of thinking are required in creating art or in better understanding the thinking or creative processes of artists. Experts were asked what important understandings or generalizations should be developed with students to achieve this goal.

Both P1 and P2 implied that studio art was the place in the art curriculum for students to learn how to manipulate images, media, and materials, and to develop technical skill. However, recall that P2 connected studio learning--or one mode of art inquiry--to at least one other, and with particular purposes: to determine how artists use media to express meanings; and to make informed judgments about the quality of execution. P2 mentioned nothing about the elements of design or formal properties here taking precedence in this goal or in any other, as all the goals presented to P2 were rejected and reformulated in the service of "art-centered learning." To P2, studio was a situated activity that must draw on aesthetics, history, or criticism in a comparative context.

P1 responded to this goal with the following key ideas, principles, and central understandings that should be developed:

Art production is an image-making activity using art media.

Students should learn aesthetic properties or visual concepts to be employed in artwork or tutored images during Visual Analysis prior to beginning studio art activity.

Organizing sensory and formal properties with expressive intent (expressive properties or meaning) must be built into the lesson objectives if the teacher wishes to instruct students in that area.
Students should learn technical skills and associated concepts necessary to manipulation of specified art media prior to beginning studio art activity.

Students should understand the teacher's lesson objectives (aesthetic properties or visual concepts to be taught) in terms of specifications for the completed artwork or tutored image. In the example lesson on contour drawing provided in these materials, these specifications are called criteria for the Evaluation of Artwork.

Note that out of all the things possible to learn and stress under Goal #2, P1 continued to stress learning and applying the elements of design. One assumption was that students must be introduced to these concepts in Visual Analysis before they can engage in making art. But remember in P2's lesson, learning the elements of design—even in the studio activity—was a reflexive, recursive, situated enterprise achieved in several related contexts and activities. Students participated in constructing this knowledge with open-ended questions. Knowledge was not prescribed by the teacher in advance and delivered to them, as seems to be the case with the above principles of P1.

Another assumption P1 made is that "expressive intent" is an isolated category divorced from other kinds of goals in making art. This purpose, or expressive intent in this case, "must be built into the lesson objectives if the teacher wishes to instruct students in that area." (italics added). However, P2 assumed that all art-making has expressive intent and qualities. All art and art-making carry meanings. Remember that each and every one of P2's sample comparative concepts in the framework presented earlier always related to meanings.

Next, P1 assumed that technical skills and the manipulation of media had to be demonstrated to students before they engaged in an art activity. While this makes sense logically and pragmatically, P2 was not limited by this logic and provided four different media in the criticism/studio lesson. There was no
technical demonstration. The only medium students might not have been familiar with was India ink, but students may have used this medium before in a previous lesson. The only rules governing the studio portion of P2's lesson were linked to the desired subject (landscapes) and an attempt to express particular feelings or meanings by describing artistic properties, interpreting several images in comparative context, and discussing their potential meanings and how these were achieved.

While the outcome was designated in P2's lesson (a landscape conveying a particular feeling), the products were apt to vary considerably, not only across small groups but individuals. In contrast, it seemed that P1's lesson would be rule-governed in more prescriptive, technical ways. Both P1 and P2 would place a strong emphasis on evaluation in light of their goals, and criteria would be specified and shared with students in advance of the studio activity. But close examination of the evaluation section in the sample lesson plan P1 submitted for Goal #2 reveals considerable narrowness and prescriptiveness. The lesson on torn- and cut-paper landscapes was adapted from the SWRL [Southwest Regional Laboratory for Educational Research and Development] Elementary Art Program (1982). The criteria P1 listed for students' completed artwork were as follows:

Each child/adult makes an image of a landscape that will contain

1. Torn shapes form recognizable mountain peaks and grassy ground.

2. Mountains cover about two-thirds the height of the picture; grass covers between one-third and one-fourth the height of the picture.

3. Clouds and water are rounded irregular shapes.

4. Tree shapes are recognizable circles, triangles, rectangles, and half-circles; treetops overlap tree trunks.

5. Trees have been distributed throughout ground area.

6. All shapes are securely pasted.
However prescribed the above criteria may seem, P1's goals in this lesson focused more on the elements of design and design principles than anything else. Thus, the lesson should be judged accordingly in terms of art production. For example, there is nothing inherently wrong with limiting and controlling variables in a lesson in order to achieve one's goals, ensure successful student outcomes, and diminish confusion. P1 provided only blue, brown, green, and white construction paper because the focus was not on creative expression but on developing students' understanding of the principles of design, or the internal organization and relationships of elements in a landscape (e.g., the use of proportion; foreground, middle ground, and background; and overlapping shapes to create perspective or depth). I suspect that P1 selected torn and cut construction paper as a medium to focus students' attention on manipulating and arranging large shapes in space rather than having them wrestle with how to depict perspective in a drawing (developmentally and technically, a more complex task).

Under "Vocabulary," P1 suggested the following "concepts" would be covered and learned:

<table>
<thead>
<tr>
<th>Landscape</th>
<th>Tear</th>
<th>Space</th>
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<tbody>
<tr>
<td>Foreground</td>
<td>Cut</td>
<td>Depth</td>
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<tr>
<td>Middle ground</td>
<td>Paste</td>
<td>Horizon</td>
</tr>
<tr>
<td>Background</td>
<td>Secure</td>
<td>Details</td>
</tr>
<tr>
<td>Shapes</td>
<td>Proportion</td>
<td>Repetition</td>
</tr>
<tr>
<td>Irregular</td>
<td>One-third</td>
<td>Variation</td>
</tr>
<tr>
<td>Geometric</td>
<td>Two-thirds</td>
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<tr>
<td>Ornamental</td>
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Under the learning objectives, students would be engaged primarily in "identifying" a landscape's foreground, middle-ground, or background, for example, or identifying similar things in other artists' works (Tao-Chi, Gaugin, Rousseau) during critical/historical analysis at the end of the lesson.
How did the university experts explain the relationships among these key ideas, central understandings, or generalizations under Goal #2? For example, do all the key ideas fit together into a single network? Are two or more of these ideas linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of these ideas form natural sequences along some common dimension?

It is fairly clear from the previous discussion under Goal #1 as to how P2 would view the relationships among the key ideas to be developed in art under Goal #2. Given one central goal for art education, all art production, concepts, and ideas are related, integrated, and connected in a large network or comparative analytical framework. The glue that holds this web together and keeps it in suspension (and tension) is inquiry focused on art exemplars, not art elements. Further, particular modes of inquiry and concepts (aesthetics, history, criticism, and studio) are always connected to meanings and meaning-making.

P1 had a very different view of how the key ideas under this goal (perhaps any other) hang together logically and are related. P1 viewed art understandings in cause/effect and rule/example relationships. Making art is a problem-solving activity. Listed below are the relationships among those central understandings P1 generated above for Goal #2:

Aesthetic properties or visual concepts taught in any lesson must remain constant throughout the first two of the three main lesson components, Visual Analysis and Art Production, if the making of artistic images is to be a problem-solving activity.

The parameters of the problem (hypotheses to be tested) appear in the unit or lesson plan as the goal or overview and specific learning objectives, further amplified by vocabulary words and images and criteria for the evaluation of completed artwork or tutored images. Studio art production must contain a problem defined well enough that its solution can be verified if it is to be a problem-solving activity.
In other words, the Lesson Overview in P1's lesson plan is the "hypotheses to be tested." Vocabulary words and images are the "aesthetic properties or visual concepts to be learned." Technical skills represent "the craftsmanship or concepts of art media manipulation to be learned." Criteria for the evaluation of completed artwork represents the "operational definition of hypotheses to be tested."

P1 provided considerable attention to and explanations for conceiving of studio art activities as problem-solving or the testing of hypotheses. Since I find P1's problem-solving conception of making art problematic on epistemological and moral grounds, I will present P1's argument first:

Instructional problems in Art Production are prescriptions for student activities based on credible art hypotheses. These hypotheses are visual, even though they are couched in words. Problem solution requires learners to test these visual hypotheses by applying visual concepts or principles learned earlier in the lesson or unit. Observer response to the completed images, either from students or teacher, verifies that learners have used correct reasoning (application of concepts or principles) in solving the problem. Children's understanding of the studio discipline may therefore be assessed by problem-solving activities and their resulting images that display concept acquisition and generalization. The problem solutions are called tutored images. The testing of a simple hypothesis will produce similar outcomes among all learners. The testing of a complex hypothesis will produce more variation.

What is problematic here is the assumption that artists can and should think and work like scientists. Some artists may approach their work this way, but many do not. All artists engage in purposeful, goal-driven activity, either to explore and develop visual images and their ideas or to achieve particular results with particular effects for themselves and other viewers. Most often, they try to accomplish all of these things when making art. But not all of the potential outcomes and effects can be known in advance of producing the artwork; that is, outcomes are hardly as definitive, predictable, and controllable as P1 described or
would lead us to believe. Further, not all of the artist’s goals may be known in
advance of engaging in the artistic process itself or making art. Artists typically
are open and responsive to the possibilities and different directions that emerge in
the process of creating art, and much of their image-making and thinking-in-
process may occur when not actually making the art object!

The second problem with P1’s conception of studio art as problem solving is
the assumption that there is "correct reasoning" in solving a visual problem.
This premise is problematic, even in the physical sciences. While the scientific
method is a socially constructed, accepted form of reasoning developed over time
since the Enlightenment, many scientists do not think and solve problems in this
logical, linear fashion. They may when they conduct controlled experiments or
report their research in journals according to the canon, but this is only a tiny
slice of scientists’ work and only one way in which they think, engage in, and
make meaning of their work. One can return to earlier biographies or studies of
famous, "expert" scientists, mathematicians, and artists to explore how images,
creative thinking, mistakes, and serendipity played into their thinking and work
(hardly hard-core science!). Or, one could turn to more recent expert-novice
studies across the disciplines or to contemporary conceptions of situated
cognition, intelligence, and theories-in-practice to ascertain how viewing art
production as hypothesizing or the hypothetico-deductive method is quite limiting.

The third problem with conceiving of art production as problem solving in
the pseudoscientific way that P1 does is in terms of its logical and moral
consequences. Logically, one is likely to get what one asked for. In education,
this implies that we cannot skirt the issue of what is worth asking students to
learn and do in art in the first place, and why. Decisions about such matters have
personal, social, and moral consequences, not just visual effects "that can be
verified by looking at the image that results."
For example, to claim that "solving the lesson problem tests whether or not students can apply specific concepts; therefore, it tests whether or not they have been learned" implies a particular epistemological and moral stance with respect to art as a discipline (the nature of art and of knowledge, and what counts as knowledge, teaching, and learning). This approach also implies a particular stance toward people, their expertise (who has them and who doesn't), and social relations.

This form of problem solving would seem to reinforce learners' dependence on the teacher as authority to define the problem, propose the "correct" solution, and to judge whether or not the problem was "solved" or the task accomplished successfully. This also could encourage students to internalize and dichotomize their learning experiences as right/wrong, good/bad, or beautiful/ugly no matter how tempered and skillful the evaluation. Such felt dichotomies would not result so much from how the evaluation is treated as it would from the separation of knowledge/knower that characterizes P1's lesson throughout. In contrast, P2's approach more seriously and genuinely honors students as knowers and active constructors of meaning. Rather than a logical, linear approach to making art, P2 offers a learning experience that is contextualized, whole, and consummatory, as Dewey (1934) would say, while respecting students' intelligence and those disciplines from which their experiences and modes of inquiry were drawn together.

I would argue that P1's approach to studio art as problem solving distorts a "constructivist" orientation. Instead, knowledge is outside the learner, either in the concepts presented by the teacher, in the images studied, or as viewed (observable, of course) in the art products students make in "tutored images." Students are not invited to define "the problem" in the first place, to propose alternative directions or solutions, nor to discuss how and why they arrived at the
images they did, and what these mean to them when all is said and done. In sum, it seems that students would never participate actively in constructing their own knowledge. While there is some wiggle room in P1's approach to problem solving, there isn't enough to foster students' goal-setting, self-regulated learning, depth of understanding, or critical thinking.

It should be clear by now that I am not arguing for free-wheeling self-expression in art or merry media exploration—although this isn't a bad thing to pursue on occasion to see if we have any imagination left to muster! I am saying that creating art (or science or history) is much more interesting, complex, and rich than P1 makes it out to be. People come at this—confront the possibilities, materials, task, context, themselves, and their potential audiences—in a variety of ways. We ought not turn to science to find favor and frameworks to do what the arts do best. Sometimes creating art is not problematic to an artist, at least in those ways defined by P1. Sometimes it's downright pleasurable because the real puzzle has no edge pieces to mark exactly when and where to begin and end. At least, that's what many artists prefer to believe. Unfortunately, schools have their edges and make us work within the boundaries.

Goal #3

Goal #3 was to develop students' dispositions to actively "attend to" and enjoy art for its own sake and to appreciate the diversity of art forms and how artists interpret human experience and the world around them; appreciate art as a form of human inquiry, expression, interpretation of the world. Whether or not written clearly, this goal was meant to address learning in/about art in personal, sociocultural, and historical contexts. Again, the experts were asked what important understandings or generalizations should be developed to achieve this goal.
P1 listed the following key ideas to develop under this goal:

Aesthetic properties or visual concepts used by students in their own artwork may also be observed in the work of adult artists.

Making and defending judgments about works of art lie in the domain of art criticism.

Placing art in cultural and historical contexts lies in the domain of art history.

Issues concerning the nature and value of art lie in the domain of aesthetics.

Interestingly, P1 has lumped all the art disciplines into this category or goal, also repeating the focus on art elements and aesthetic properties in artworks as the first key idea. This time, however, connections are drawn between the elements of design in students' artwork to those in adult exemplars.

While Goal #3 implies a stronger emphasis on aesthetics, art history, and art criticism than studying the elements of design or studio (artistic processes), P1 packed all three interests into this one goal or category. Given the key ideas and thrust of the sample lesson plans submitted by P1 for Goals #1 and #2, in DBAE parlance this is equivalent to giving aesthetics, art criticism, and art history only one-fourth of a discipline-based curriculum instead of three-fourths. Recall that P2's comparative analytical framework and single recreated goal drew heavily from Goal #3 in the first place, and all other concepts, generalizations, and activities played into this goal through comparative analyses. What is interesting here is that both P1 and P2 connect students' art and art-making to the larger context of what adults do in the visual arts disciplines. But the ways in which they attempt to make these important connections and their degree of success in doing so differ dramatically.

At this point, all P1 can offer under key ideas are definitions of each of the four disciplines instead of key understandings to be developed with students in an
integrated fashion within and across these art disciplines. Except for aesthetic properties or visual concepts listed as the first key idea, the other three key ideas seem far removed from the realm of student understanding, experience, and art activities. We have no sense of what these would look like in practice. They read sort of like, "Oh, by the way . . ." But this is an unfair criticism without pursuing how P1 saw the relationships of these key ideas.

What kinds of relationships exist among the key ideas under Goal #3, according to the university experts? Do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension?

P1 elaborates, providing the following relationships:

Aesthetic properties or visual concepts taught in any lesson (including those of expression or meaning) must remain constant throughout the three main lesson components, Visual Analysis, and Art Production, if the lesson is to be conceptually focused.

Identification of the same concepts in different artistic contexts during Critical Analysis constitutes transfer of learning.

Comparison and contrast of similar and different concepts in similar and different artistic contexts during Critical Analysis constitutes the beginning of art criticism.

Historical Analysis presents information about the artist, the physical condition, the time period, and the cultural environment of the work of art.

Discussion of why the work is considered art and the kinds of meaning it holds introduces students to aesthetic concerns.

P1's conception of how Goal #3 and its related understandings connect with the other aspects of art learning presented earlier now bears a strong resemblance to the connections proposed by P2 in the first place. For example, multiple comparative exemplars are used, similar historical information is
provided students, and multiple artistic "contexts" (subject, medium, style, etc.) are used to foster students' understanding of big ideas, particularly of the kind that help them make connections. It is doubtful, however, that P2 would call this approach to learning and its potential effects "transfer," as does P1.

Both P1 and P2 require lessons that have internal consistency and cohere logically to promote students' understanding and applications. However, P1 now shifts to a "network" or relational view of knowledge like that of P2, rather than persist in cause/effect or rule/example relationships. **Below is how P1 would present these key ideas to students:**

Art images in similar media and styles, similar media and dissimilar styles, or dissimilar media and styles should contain the same aesthetic properties or visual concepts taught in Visual Analysis and applied during Art Production.

Information of historical value (titles, sizes, dates, artists' names, dates of lifespans, countries of origin, style characteristics, iconography, manner of use) pertaining to the art images used in the lesson should be presented.

Questions pertaining to the construction, historical context, meaning, and value of the artworks shown should elicit knowledgeable responses from students, and is another form of problem solving.

What is different between P1 and P2 is that P2 generated more categories of relational concepts than style and medium (similar or dissimilar). P1 narrowly focused on two dimensions which again (or by default) would emphasize the formal analysis of the elements of design and the characteristic ways in which these elements have been organized into recognizable styles. P2 generated an infinite array of relationships that could be explored under each of the categories of criticism, history, and aesthetics. Also, part of each and every one of P2's permutations and equations was "meaning."
In contrast, P1 submerges "meanings" in the last key understanding listed, and how meaning-making is "another form of problem solving" is unclear. One would hope that there are no unequivocable "right" answers this time, as historians, critics, and philosophers disagree, whether this is in art or other disciplines. Finally, P1's historical "information" is not connected well beyond fact-giving. In other words, it seems that historical inquiry would not be used as a provocative context for students to make inferences and informed judgments.

So, what could historical inquiry look like in a lesson that would foster critical thinking and connected learning? Remember the "Starry Night" unit of P2's preservice teacher? P2 submitted a sample lesson from this unit that focused on art history/studio as well as criticism/studio. Recall that the lessons were designed for 9-12-year-olds and were about 90 minutes each in length.

The criticism lesson's comparative focus was "subject to meaning; same subject to different expressive meanings." The history lesson's comparative focus was "historical period to same period in expression of meanings." Given the unit's focus, the key artwork in both lessons was Vincent Van Gogh's "Starry Night." The comparative exemplars used in the history/studio lesson were: Seurat's "Sunday Afternoon on the Island of La Grande Jatte"; Monet's "Rouen Cathedral"; and Gauguin's "Tahitian Landscape." Supplementary exemplars were de Vlaminck's "Riverbank at Carrieres-sur-Sienne" and Matisse's "Woman with a Hat."

The lesson begins with an "Art Detective" game similar to "Clue" which was designed by the teacher who wrote the lesson plan. The object of this game is for students to "collect all the clues and to reconstruct a context for each of the [color] prints ["Starry Night" and three exemplars]." An explanation follows:

Students should be able to name which works influenced each other, and in what way, as well as give information such as name, approximate date, style, author, country, etc. The purpose of the
The game is to develop skills which art historians use in reconstructing contexts for works.

The class is divided into four teams to play the game, drawing trivia cards and recording clues on notepads. When all the clues are exhausted "or teams feel they have constructed thorough contexts," they submit their "team guess" to the teacher.

The kinds of constructed answers desired were as follows:

Monet is French. He painted "Rouen Cathedral." He was called an impressionist because he painted in a manner that the viewer only got the impression of the subject. He was interested in light and color, not the subject. He looked at color scientifically, not as a means for expression. He painted with short, choppy brushstrokes to give the illusion of shimmering light.

Seurat is French. He painted "Sunday Afternoon on the Island of La Grande Jatte." He was influenced by Mo; et. He also looked at color scientifically, not as a means for expression. He painted with little dots of color which seem to mix when viewed from a distance.

Van Gogh is Dutch. He painted "Starry Night." He came to Paris to study impressionism but was dissatisfied with the nonexpressiveness of it. He felt color and brushstrokes could convey strong emotions. He used bright colors and choppy brushstrokes like the impressionists, but his paintings were very expressive of his emotions.

Gauguin is French. He painted "Tahitian Landscape." He was a good friend to Van Gogh and often painted with him. He also felt colors could express emotions, but he did not emphasize brushstrokes like Van Gogh.

The two primary objectives of this history/studio lesson and criteria for evaluation are as follows:

1. Students will learn how color and brushstrokes changed over the years to create entirely different expressive meanings, from nonexpressive to expressive. They will learn this by playing the art detective game and participating in the art activities in the student handout.
EVALUATION: The art detective game evaluates whether the students made the correct inferences about the paintings and how they relate to each other. Teacher will have a checklist for each group to see if they arrived at the correct answers. Also, during the student handout activity, teacher will ask students periodically to reiterate what has been learned.

2. Students will learn that methods of painting evolve out of each other historically by examining the evidence given them and speculating what style evolving from Van Gogh's expressionism would look like. They will take off on the idea that painting became more expressive and color and brushstrokes more important.

EVALUATION: Students will paint a picture in the style they conceptualized. Works will be posted on the bulletin board. Teacher will then show slide of Fauvist painting, the method of painting that evolved from expressionism. Teacher will have a checklist with each student's name and note whether his or her work parallels Fauvism or at least expands on the color and brushstroke theme of "Starry Night."

After the art detective game, debriefing (asking students for their "conclusions"), and going over the vocabulary list, students view slides of the key artwork ("Starry Night," which is familiar to them) and three comparative exemplars. They are guided by the teacher's key questions in reference to each exemplar and their relation to one another. They use handouts for additional information on the artists, styles, and their influences. The questions ask who was interested in what, who influenced whom, who was expressive and nonexpressive, and what features in the paintings reflect these particular interests or changes. The handouts also have clever mini-exercises for students to do with oil pastels or paint as they respond to the teacher's questions and work with the images, text, and styles. (See Figures 8 and 9.) Another review is conducted over the major concepts.
Claude Monet was mainly interested in the effects of color and light. Since he was not concerned with subject matter, he would often paint the same subject 20 to 30 times, such as the Rouen Cathedral, to capture the lighting at different times of the day.

Claude discovered that primary colors looked sharper when complementary colors were placed next to them. When complementary colors were placed on top of a primary, a neutral tone could be made. Claude felt that shadows looked more natural this way. Claude looked at colors in a scientific way, not in an expressive way. He used short, choppy brushstrokes to create the effect of shimmering light.

CREATE A SHADOW LIKE MONET. COLOR ALL OF THE BOX WITH SHORT DASHES OF BLUE. THEN APPLY DASHES OF ORANGE ON TOP OF THE BLUE, ON THE TOP AND SIDE OF THE BOX.

Figure 8. Sample student handout for one of P2’s lessons in art history/studio.
His brushstrokes were small and round. He was not interested in expressing feeling or emotion with either his colors or his brushstrokes.

Fill in every other dot with either:
- blue + red or...
- blue + yellow or...
- red + yellow

Hold it at arm's length... what color does it make?

are simplified into broad planes, or areas, and lines. He felt color had strong emotional power.

DRAW A SIMPLIFIED LANDSCAPE, AND THEN FILL IN AREAS WITH INTENSE COLORS. STICK WITH NATURAL COLORS... THE SKY SHOULD BE BLUE, THE GRASS GREEN, ETC.

STARRY NIGHT is a good example of color and brushstrokes used to express emotion.

USING A SINGLE COLOR, AND A SINGLE BRUSHSTROKE, TRY TO EXPRESS THE EMOTION OF "JOY".

Figure 9. Sample mini-applications of stylistic concepts from student handouts in a P2 lesson in art history/studio.
Then in P2's lesson, students are asked to "imagine a method of painting which could be evolved from the method of 'Starry Night'." Students are asked to think about which direction "painting was heading" (from nonexpressive to expressive), and then are asked to paint a picture in that style. Students are advised that they may choose a smaller board (8" x 10") should their style involve meticulous work, and they are assured "there is no wrong solution." When students complete their paintings, they post these on the bulletin board for later viewing and clean up.

Students then are shown the Vlaminck slide and are introduced to Fauvism, a style that evolved from the methods used by Van Gogh and Gauguin. They are told what "fauve" means in French (wild beast) and that the colors in this style and time period are very bright and bold, "pure emotion." The teacher then asks each student to discuss his or her own painting and how each saw an evolution in history from "Starry Night" to their own style.

In sum, P2's lesson suggests how art history can be taught and learned in ways that require close observation; comparative analyses of a manageable set of images and facts; mini-applications of aesthetic, technical, and style concepts; inferencing; creative synthesis and expression (or a quasi open-ended studio activity) as a kind of "prediction" of style based on limited historical information; and artistic discourse involving criticism. While this lesson appears to be based on a "problem-solving" orientation (detective game and painted "solutions"), P2's conception of problem solving departs radically from the kind of problem solving defined by P1's lessons.

Nevertheless, one could argue that the preservice teacher who developed P2's lesson, even though doing her homework or "research" to prepare the background information for this lesson, had a naive, narrow conception of history as a discipline and historiography. For example, consider the following: history
is viewed as a collection of uncontestable facts; one art style unproblematically influences another in neat chronological time without disruption or simultaneously existing styles; other kinds of contextual information a historian might draw upon are ignored like the European context, Parisian context, critical or public response to artists' work, newspaper clippings or reviews, economic influences, the influence of science on art and artists, influences of other cultures and art on these artists (Gauguin, for example), artifacts (or simulated ones) other than art objects or images per se, such as excerpts from artists' letters, journals, sketchbooks, and so on.

In other words, P2's teacher attempts to help students construct a meaningful context for the exemplars or students' historical understanding but doesn't herself seem to have a good grasp of what doing history means beyond collecting and assembling a few facts and making inferences from these about how and why art styles change over time. But the lesson is commendable in terms of the typical fare on art history one sees in classrooms—or the absence of it altogether! Now, let's turn back to how P1 viewed the importance of art history, criticism, or the sociocultural context of art.

P1's rationale for Goal #3's potential impact on learners in learning art history and criticism follows:

As children learn to evaluate their own images and those of classmates against a clear standard during the Art Production segment of the lesson, they are learning basic rules of art criticism. Critical Analysis also becomes another opportunity for transfer of learning, a way of generalizing concepts by recognizing them in other artistic contexts. The first two occur when concepts taught during Visual Analysis are applied in children's own images, and when they recognize them in the images made by other students.

Children's tutored images made in an art class should not be ends in themselves; children, like adult artists, learn to appreciate the larger frame of reference within which their efforts lie. They should learn to perceive similarities and differences between their own artwork and adult images from two different points of view, commonly called
art criticism and art history. Analysis of aesthetic, historical, and cultural aspects of adult art will tie school learning to the real world and build the background knowledge that eventually will distinguish these children as artistically educated adults.

P1's argument now is quite similar to P2's posed earlier in the "contextual framework and continuum" (Figure 1). Recall that P2 stated, "emphasis is given to fostering student understanding of the shared public meanings of art through inquiry that focuses on selected artworks in relevant contexts." Further, these contexts provide a means of "relating students' personal viewpoints to broader frames of reference." And, both P1 and P2 clearly demonstrate an interest in helping students see, understand, and connect to "larger frames of reference."

However, the difference between P1 and P2 in this argument is a significant but subtle one. Aside from the contextual background and interpretations I have constructed to this point, here are some linguistic clues that helped me discern the difference. P2 used terms like "understanding," "meanings," "inquiry," and "relevant" contexts. P1 used terms like "transfer," "recognizing" (twice), "perceive," "efforts," and "images." P2 used "shared public meanings," and P1 used "a clear standard." P2 referred to "students' personal viewpoints," and P1 referred to students' products, "artwork," or "images."

P2's initial point of reference from which to connect art learning and larger frames of reference was the students, and this happened to be their viewpoints, not their artwork. This suggests that children are viewed as thinking, knowledgeable persons who have worthwhile ideas and perspectives, even if they are not mature adults. P1's initial point of reference was "adult art," which then was tied to "school learning," and then tied to the "real world," which happened not to be the students' lifeworld but a distant world of long ago and far away, of grown-ups and great works, a world and history already finished, and what counts as art already decided. And it was all there for the scanning.
Indeed, P1 recommended that a lesson designed to accomplish Goal #3 involve "aesthetic scanning" again and those "initiating" and "continuing" questions presented earlier under Goal #1. P1 admitted that most of the art lessons used as examples of the discipline-based approach focus more on sensory and formal properties (elements and principles) or technical aspects of artworks than on expressive properties and meaning. This emphasis simply reflects existing practice in art education.

But P1 wasn’t able to offer a better alternative or example, suggesting again that one can be a strong DBAE advocate and not fully comprehend how best to put personal, social, cultural, and historical interests into practice. Instead, P1 submitted a lesson developed and taught by a teacher of junior high and high school students, using P1’s lesson plan format and specifications.

According to P1, this lesson "teaches the concept of satire as an expressive characteristic of certain kinds of art." This was about all I could tease out of the material in terms of figuring out why this lesson would be important or meaningful to teach. Photocopies of Grant Wood’s famous "American Gothic" painting were altered with magazine clippings into a collage with some reference to "regionalism and futurism as elements in visual satire." Students were to alter the visual elements in terms of environment, clothing, and so forth in such a way that the painting’s "original source can no longer be identified." The criteria for evaluation was as follows:

ажд student makes an image that will

1. Satirize "American Gothic."
2. Keep the 8 1/2" x 11" photocopy format.
3. Keep same arrangement of main shapes: man on right, woman on left; triangle shape in background between them, implement in man’s hand.
5. Not be glued down until checked and approved by teacher.
6. Contain neatly cut and glued shapes.
Art images selected in this lesson for critical/historical analysis in the realm of "regionalism" were by Grant Wood, Thomas Hart Benton, Edward Hopper, Charles Burchfield, and Reginald Marsh. Images used as exemplars for "futurism" were by Frank Stella, Umberto Boccioni, Charles Demuth, and Stuart Davis. Satirical versions of the "Mona Lisa" were used in the earlier part of the lesson.

The most important question left unanswered is, "Why visual satire?" As in the other lessons, P1's lesson format does not have a space for such explanations, and one must surmise (or hope) that the reasons for students learning particular things and engaging in certain kinds of activities are explained to them by the teacher during class. The lesson format, criteria for evaluation, and ancillary information on questioning techniques also suggest that P1's approach to instruction would be teacher-centered to a whole group in a traditional studio arrangement, and that there would be little critical artistic discourse, debate, writing, reading, or simulations to foster students' understanding in varied contexts.

P1 recognized the limitations of DBAE as taught in most classrooms. For one, more critical/historical content needs to be seen in art curricula and taught at the elementary level. Something that P1 thought should be taught in more depth was "style." P1 elaborated:

For some years now scholars have noted that children in formal art classes tend to make art in a particular "school art style." Children's tutored images [with a DBAE focus], however, may lack some of the school art style characteristics: a lot of manual activity (rather than use of the head), easily manipulated media, filled space, clean bright colors, interesting textures, spontaneous brush strokes, looseness as opposed to tightness, no copying, a range of subjects and themes, and, most especially, identifiable differences among students in all of these.
One might ask, So, what's wrong with the school art style? And why is it presumed that students did not "use their heads" as well as their hands when creating this art?

P1 suggested that the controversy over what kinds of visual characteristics children's schooled images should display "reveals unarticulated differences in attitudes toward child art from those towards adult art." I would suggest it has more to do with different attitudes toward children and what is understood and valued as *worthwhile art knowledge* for them to develop. P1 stated:

> From the discipline-based point of view, style is an artistic variable like subject matter and medium. DBAE recognizes many styles of adult art and presents them to students; students incorporate a variety of styles in their tutored images. Any aesthetic value the school art style may have for adults does not justify its instructional utility. Unless images in this style were to display specific, designated, identifiable concepts, they would not demonstrate art learning or problem solving in the sense presented [here].

Both P1 and P2 believed that an ideal art curriculum would possess all the key features outlined at the beginning of this paper. Both supported disciplined-based art education in terms of the importance of attending more to aesthetics, art history, and art criticism and less to studio or art production divorced from these interests. Both believed their ideas represented a cognitive, conceptual, even constructivist orientation to art knowledge, teaching, and learning. Both believed that learning art must be situated in meaningful, variable contexts for comparative analysis. Both believed that lessons should cohere logically and in sustained fashion to meet worthy goals and objectives. But the two university experts were remarkably different in the ways they articulated their ideal curricula into practice!

Readers also are reminded that these two perspectives, however alike or dissimilar, represent only two orientations to curriculum. In practice, one stresses a technical/behaviorist orientation; the other, constructivist. Both are
subject-centered, and in theory, both view subject matter from the perspective of academic rationalism, P2 more so than P1. Other experts, however, might suggest that the organizing center of an ideal curriculum should be only one of the disciplines in art (not four), or even some aspect of aesthetic ways of knowing that has been rejected, diminished, or ignored altogether in the DBAE movement. The focus might draw on Dewey's (1934) later works (Art as Experience), phenomenology, feminist theory and pedagogy, critical theory, ecological aesthetics, or local art-making in multicultural or community contexts in ways that schools, the fine arts, and disciplinary approaches to the arts either do not value or de-emphasize.

The next section describes how three expert teachers conceived of ideal art curricula and what teaching for understanding would look like in practice.
Art Teachers' Views of an Ideal Art Curriculum

Key Features of an Ideal Curriculum

All participants in this study were asked if they agreed with the features of ideal curricula listed below, to elaborate on any disagreements they might have, and to identify any additional features that they thought were important in art and which ought to be included. These key features follow:

1. balancing breadth with depth by addressing limited content but developing it sufficiently to ensure conceptual understanding

2. organizing the content around a limited number of powerful ideas (basic understandings and principles rooted in the discipline)

3. emphasizing the relationships between powerful ideas, both by contrasting along common dimensions and integrating across dimensions, in order to produce knowledge structures that are differentiated yet cohesive

4. providing students not only with instruction but also with opportunities to actively process information and construct meaning

5. fostering problem solving and other higher order thinking skills in the context of knowledge application. Thus, the focus is less on thinking processes per se and more on how to make use of previously acquired knowledge in new contexts.

T1 agreed with all the key features of an ideal curriculum, however, raised concerns about the first one on balancing breadth and depth. While agreeing that teaching in greater depth was important, T1 commented:

Current elementary curriculum contains many varied subjects, each viewed as valuable to student learning by one group or another. If curriculum is to be adjusted to include fewer subject areas of greater depth, which areas will be eliminated? Will these areas simply be included under the scope of larger subject areas?

While raising an important curriculum question, a perennial issue, in fact, T1 viewed this problem more broadly perhaps than Center researchers intended. At issue for Center researchers was balancing breadth and depth within a subject
area, not across the whole school curriculum. But T1 raised equally valid questions with respect to readjusting curricular balance across the school curriculum in finite time and among competing interests.

T2 agreed with all the key features identified in an ideal art curriculum. T2 seemed to reinterpret or rephrase those features presented by Center researchers, as follows:

1. Teaching fewer and more pertinent concepts in depth to insure understandings.

2. Organizing content around limited powerful ideas.

3. Taking these ideas and stretching them (interrelationships with other disciplines within the [school] curriculum).

4. Instruct children but let them have opportunities to explore (try/fail/succeed) and develop personal understandings.

5. Help children bring prior experience and knowledge to current problems.

In contrast, T3 wrote more narratively and did not present lists of "to-dos" and desirable features of a curriculum without elaboration. On the whole, T3 agreed with the key features of an ideal curriculum generated by the Center and also with the criticism that most curricula are fragmented, or are a cluster of disconnected content. But T3 was also skeptical that "an ideal curriculum" alone could solve this and other problems identified in the study and viewed the teacher as the key linchpin in developing students' understanding as creator and mediator of this ideal curriculum.

What about the teacher who is expected to "teach" from this ideal curriculum? I believe the teacher provides the environment (physical and psychological) in which students learn. The written curriculum alone cannot be singled out as the solution to effective teaching. The teacher's attitude and enthusiasm about the material being presented appears to be a major factor in learning. The teacher must understand and support the major concepts of the
curriculum. The teacher must be alive and excited about learning, research, and discovery.

Even though the Center defined curriculum much more broadly than the paper curriculum (e.g. including teaching, activities, forms of assessment, etc.), T3 vigorously pursued this concern about the teacher's role in an ideal curriculum. As with the other teachers, T3 was very student-centered in this explanation of the teacher's role:

The students must feel comfortable with the "psychological" environment created by fellow students and the teacher. If the students are encouraged to creatively solve problems in an individual manner, is there an environment which supports and fosters uniqueness of a person and his/her attitudes and beliefs? Does the teacher/school reward this type of thinking? If our students are expected to continue learning beyond our classroom, [is the teacher a role model] for this type of behavior?

The actions, attitudes, and responses of a teacher appear to be just as important to successful learning as does the written curriculum... How can an ideal curriculum be implemented school-wide if the teaching staff isn't considered?

I do see many roadblocks to changing the current teaching methods. I also see a need for change and improvement within our curriculums. Hopefully, the problems of implementation will be addressed and dealt with before an ideal curriculum is expected to improve the quality of today's education.

T3 had additional comments about three of the ideal features. With respect to limiting content (breadth to achieve more depth), T3 was concerned about what kinds of changes in content needed to be reflected in a curriculum to reflect societal changes. T3 also was concerned about the risk of limiting students' encounters with culturally diverse art forms by limiting the content. Limiting content would require serious consideration and difficult choices in terms of what content to select, emphasize, or omit to achieve more depth. T3 elaborated:

My concern would relate to an extreme reaction we may have toward disconnected/fragmented curriculums. I would hope that the limited content we have chosen today will be reviewed often and subject to future reevaluation and possible change. Rapid change is
the forecast of the future. We as teachers must be in tune with the
constant changes. We must be able to adapt and be flexible enough to
make changes as need be. These adaptations or changes would
possibly mean shifting priorities within the limited content area, or
as an extreme, dropping an area of content and focusing on critical
new material to meet the needs of our students.

Another facet which is forecasted for the future is that our
American culture will become more multi-cultural. I would hope
that the idea of limited content of our ideal curricula would include
the study of cultures other than the white, Anglo-Saxon American.
Most school curriculums focus on a middle-class mainstream
perspective which is too narrow and limiting to understand diverse
cultures.

Thus, T3 also was concerned about student diversity, the particular needs of
students of color, and relevance, not only in terms of meeting students' needs but
also the need to be responsive to contemporary life and their future.

T3 also wished to clarify the key feature related to selecting "powerful
ideas" for the curriculum, and again on the basis of inclusion. "I hope the
selection process of these limited ideas is broad enough to include the study of
Western and non-Western cultures. These powerful ideas should also be subject
to review and possible revision."

Finally, with respect to the last key feature, fostering problem solving and
higher order applications, T3 stated:

Using previously acquired knowledge in a new context implies
creativity. I would like this statement to read, "fostering creative
problem solving . . ." I believe this suggests a certain type of attitude
or response for independent thinking. This would encourage
students to ask questions and not be afraid to take risks. It also
implies an "openness" for free choices.

Both T2 and T3 demonstrated a strong interest in developing students' capacities
to engage in creative problem solving and independent forms of thinking and
applications that would not rely heavily on external authority nor extrinsic
rewards.
What additional features in an ideal art curriculum did teacher experts view as important? T1 suggested that an ideal curriculum ought to develop students' understanding of why the curriculum is relevant or valuable to them in everyday life. T1 commented:

Students have a difficult time sitting in a classroom, trying to learn, when they feel the subject they are studying is not important or of no value to them. . . . They ask, "Why do I need to know this?" Educators should be able to give a rationale for why they are teaching specific information, and if they don't have a rationale, why bother to teach it?

From a DBAE perspective, T1 also added that an ideal art curriculum should emphasize four content areas in visual arts: "art history, art in society, criticism, and studio throughout the art curriculum, with less emphasis on the studio aspect." T1 added:

Students leave the "typical" art room with a fingerpainting and a pinch pot, learning little to nothing about art. The work of famous artists should be seen and discussed in every classroom. Students should be learning methods of criticism so they can begin to intelligently talk about what they see around them rather than to merely walk around making rash judgments, "I don't like it . . . therefore, it isn't art." Most importantly, students need to be aware of the visual stimuli around them and learn to recognize how art is used throughout society. For example, it would be valuable for students to know how advertisers use various images to sway the buyer into purchasing their particular product. Students need to learn how to read visual images.

The teaching of studio techniques should be used only as a means of reinforcing curriculum [as for Key Idea #4 on actively processing information and constructing meaning] . . . and helping to develop a greater appreciation for the work of great artists. Studio should not be taught as the sole component of art education.

Thus, two important key ideas related to an ideal curriculum for T1 was student relevancy and giving more attention to the arts disciplines besides studio or production.
T2 added the following key features deemed important for an ideal art curriculum:

1. Experience content.
2. Develop visual/perceptual skills.
3. Develop divergent strategies.
4. Respect and accept the ideas and solutions of peers.
5. Understanding and skill in the use of historical method.
6. Understanding and skill in the use of critical method.
7. Evaluation strategies: Situational interpretive (clarification of the meaning of situations); critical-reflective (normative knowledge); empirical-analytic (nomological knowledge).
8. Knowledge and application of art processes, tools and materials.
9. Social and cultural heritage as exemplified through the arts across time.
10. Emphasize the uniqueness of the individual in the making and understanding of art.
11. Emphasize intrinsic rather than extrinsic goals for students in planning and executing lessons in art.

One could argue that many of these ideas that T2 presented above are goals for instruction, not necessarily features of a curriculum. There was no narrative presented with T2's lists, thus it is difficult to ascertain what some of these items mean. There is evidence of some attention to critical and historical methods as well as art in sociocultural context, or disciplinary areas beyond studio. Several items reflect an interest in individual or personal learning rather than whole-group learning. And several of these items reflect an interest in self-regulated learning, tolerance for multiple outcomes, divergent thinking, and independent problem solving.

T3 thought the following additional features would be important in an ideal curriculum. First, "a network or structure for further learning" was critical. "The ability to develop relationships or connections between prior and new knowledge is important. A teacher must understand the students' sense of reality in order to make these connections." Again, T3 stressed the importance of
context, particularly as this relates to the needs of racially and culturally diverse students and a responsiveness to their future needs in a complex, global society.

I believe that an ideal curriculum for any area of study should recognize and acknowledge the social environment in which it exists. The community in which we teach and the students we teach should be understood before we develop "limited content" or "powerful ideas" which will meet the needs (present and future) of our students.

By acknowledging and addressing the culture of our students, we are also helping children create a more realistic picture of their community. I believe that one of the major goals of education is to help students understand and appreciate their immediate culture, thus giving them the basis to explore and understand alternative cultures.

Teachers must realize that the community is the environment in which their students make critical decisions. We must help students solve problems within this framework (the immediate) in order for them to understand and address future problems in a broader context.

I am teaching in a racially and culturally diverse community. By encompassing, complementing, and building a curriculum which is based on the values and beliefs of this community, I would be fostering understanding and cooperation among people in a pluralistic society.

An ideal curriculum should be designed to respond to future predictions and focus attention on the needs of our students who will be adults in the 21st century. A curriculum which concentrates on the diversity of human values and beliefs will be the foundation to understanding and appreciating alternative viewpoints in the future. Research suggests that the period from age 7 to 12 is optimal for education directed toward attitudes and objectives, and for openness about the world.

The business world forecasts that change will be the norm in the future. Employees will be expected to adapt to change. People will need to be more open-minded in order to think creatively. A limited perspective will be a dead-end trap.

All these predictions should be considered in preparing our students for the 21st century. Our students can no longer be learners who passively absorb subject matter, but young researchers questioning, researching, and actively exploring their environment.

In summary, all three art teachers more or less agreed with the key features of an ideal curriculum. T1 agreed with the key features but expressed concern about how content selection and balance would be decided or accomplished, given the typical constraints in an elementary school curriculum
and competing interests. Student relevance also was of paramount interest to T1, and this ought to be a key feature or concern of any ideal curriculum. T1 also suggested that an ideal art curriculum must include less emphasis on studio production and more on art history, criticism, and aesthetics—or those content areas proposed in DBAE.

T2 agreed with the key features presented by the Center but also suggested that important ideas in an ideal art curriculum should be linked to other disciplinary areas in the school curriculum and that students should have opportunities to explore (trying, failing, succeeding) in order to develop personal, independent understandings. T2 also added a long list of desirable key features, which read more like goals for an art curriculum. Some pertained to particular content thought to be critical in art (understanding art in social context) and forms of inquiry (critical and historical methods), as well as developing students' creative and critical thinking and problem solving (e.g., divergent thinking, diminishing reliance on external authority). Attention to creative, independent problem solving also was of keen interest to T1.

On the whole, T3 agreed with the list of key features. But this teacher was skeptical that an "ideal curriculum" alone could solve problems such as the presentation of fragmented, disconnected ideas or shallow, make-and-take learning. The teacher's knowledge, disposition toward art, and enthusiasm were fundamental to developing students understanding in art and helping them make connections to other subject areas and real life.

Like T1, T3 also was concerned about content selection and representation, but in a different way. T3 was concerned that whatever content or "powerful ideas" were selected, these should prepare students for life in the present and future to respond to a complex, changing world. T3 also was concerned that content selection be sensitive, inclusive, and representative of non-Western
cultures or cultural pluralism and diversity rather than feature only Western "great works" and artists. More than T1 and T2, T3 stressed that art must be understood in cultural context(s) and that any ideal curriculum must begin with the representative ethnicities and cultures of the students and their local communities. Finally, T3 was skeptical of DBAE if this approach defined art ideas and experiences as universal, decontextualized, generalizable knowledge for all that would focus only on artworks as entities unto themselves, discounting the diverse cultures and contexts of art objects, artists, and percipients or viewers.

Teachers' Responses to the Goals

Goal #1

Goal #1 was to develop an understanding of how art elements and principles of design (lines, shape, color, etc.) are selected, organized, and presented by artists with expressive intent or to communicate meaning. Teachers were asked, what important understandings or generalizations should be developed if this goal is to be accomplished?

T1 listed the following big ideas or generalizations under Goal #1:

Students need to understand the following:

1. Use of basic elements, for example, color theory (an artist may choose red to convey anger) or the use of a line (diagonal is more energetic than horizontal).
2. What is a symbol? Are there different types of symbols (graphic, verbal, dreams)?
3. Why would an artist want to communicate meaning?
   a. Expression
   b. Social description
   c. Advertising
   d. Create controversy

T1 did not identify what these "elements" of design are, except by a couple of examples (color, line), and explain the differences among symbols cited. But it is clear that T1 makes a strong connection between visual elements and their
expressive intent or potential meanings and uses. Visual elements do not float in isolation as a specialized body of knowledge separate from their application and interpretation.

Unlike T1, who never squarely addressed Goal #1 in terms of defining what these elements are, T2 provided the following key understandings with respect to learning the elements of design. T2 chunked these elements by "color," "line," "shape," and "texture." While presented in isolation, several of the statements below include principles of design and important relationships among these elements, not simply facts about these elements in isolation of one another:

**COLOR**
- Color is used to express many moods.
- Color captures the attention of the viewer and/or leads them through the art object.
- People have "favorite" colors.
- There are "rules" to understand in the use of color:
  1. The placement of color according to natural arrangement as in a rainbow, prism, color wheel.
  2. Colors can be classified as primary, secondary, intermediate, analogous, complimentary, etc.
- Without light, there is no color.
- Artists use color to express and convey ideas.

**LINE**
- Lines can be definite or unified.
- Lines can denote contour, action, movement, and pattern.
- Lines can direct attention to or away from viewer focus.
- Lines can vary in shape, size, and direction.
- Before children make shapes, they make lines--scribbles, random marks.

**SHAPE**
- Shapes are made by joining lines.
- Shapes can be the result of imprints such as hands, feet, etc. pressed in paint or clay.
- Shapes can be random or controlled.
- The world is full of shapes.

**TEXTURE**
- Texture is how something feels.
- Texture can be patterns, and patterns texture.
Artists use many techniques to show texture in different media. Without actually touching a surface, the eye gives us clues as to its texture.

Some of the above ideas generated by T2 deal with child development (scribbles before shapes), and it is unclear as to what these matters have to do with those understandings we wish to develop in students. T2 not only pays attention to generalizations about art (e.g., textures can be patterns) but also how these elements or key ideas are related to creating and viewing art. As with T1, T2 also suggests that understanding art involves understanding people's relationships to or involvement in the subject.

T3 listed the following important key ideas for accomplishing Goal #1 as these related to the elements of design and expressive intent:

1. Art is an object which is integrated with human behavior and must be considered within its various cultural and social contexts. Emphasis on the context which an art object was created helps students to question, to ponder, and consider symbols, values, and the artist who made them.

2. The functions of art are varied among the Western and non-Western societies. Art not only can decorate and enhance one's environment, but also transmit, sustain, and reflect religious, political, technological, leisure, and play aspects of a culture.

3. The visual elements and symbols of traditional art are culturally conditioned. Traditional art forms communicate and express the historical traditions, values, and beliefs of a culture. Contemporary artists may continue to create art forms that follow traditional cultural beliefs or decide to reject tradition and use art as a personal means of creative expression.

4. Art is not a universal language and should be perceived as many different languages. These languages can only be understood or decoded when we analyze, interpret, and understand the culture in which the art form was produced.

5. Our Western culture rewards creative expression. The selection and organization of visual elements and symbols are a personal decision of the artist. Just as an author selects specific words to
express a thought, so does an artist use his [sic] vocabulary (line, shape, colors, etc.) to communicate an idea.

6. The artist is the person who does the selecting, organizing, and presenting of visual elements and symbols. Researching and focusing our attention on the role of the artists within a given culture will help us understand the use of these visual elements and symbols. The role of an artist is conditioned by the particular values of that culture. An artist may be a magician, teacher, mythmaker, sociotherapist, catalyst of social change, and/or an enhancer and decorator.

7. The artist is a message producer and the viewer is the message receiver. The artist must consider his [sic] audience or viewers when attempting to communicate. The viewer must be able to decode the symbols used by the artist (visual information handling).

Given the writing style and language of most of T3's material, I suspect that several of the above points were appropriated from another source, but T3 did not reference these. What is important here is that T3 obviously values these ideas and thinks these are central to an ideal curriculum. Whereas T1 and T2 tentatively acknowledge the social context of art, this is a central understanding or guiding principle for T3. What we call art elements or worthwhile knowledge in art in the first place is socially and culturally determined; that is, what we value or present as art knowledge will differ by culture. Our task is to develop understandings and appreciation of the ways in which diverse cultures construe art, art knowledge, and the artist and their roles or functions. Art elements and expressive intent cannot be understand without understanding the culture(s) in which these are embedded, constructed, and understood.

How did the teacher experts explain the relationships among these big ideas, central understandings, or generalizations under Goal #1? For example, do all the key ideas fit together into a single network? Are two or more of these ideas linked through cause/effect, rule/example, whole/part, or other logical
relationships? Do some of the ideas form natural sequences along some common dimension?

Given the list of key ideas generated above, T1 suggested that there was a logical, sequential order to the three ideas that should be followed.

Most art educators teach the use of basic elements. Some most creatively, but they usually leave it at that. The teaching of symbols begins to explain how artists use the basic elements to convey meaning. [The last key idea] tells us why artists use symbols to convey meaning in their work. It would be difficult for students to understand the concept of why artists attempt to communicate meaning in their work if [they] have little to no understanding of the basic elements or of what a symbol is.

T2 viewed the relationship among the key ideas for Goal #1 (color, line, shape, texture presented earlier) as highly interrelated, or a flexible network. There were several "cuts" on the elements of design. T2 explained:

The basic elements of color, line, shape and texture are interrelated. A "square" can be made by cutting a piece of paper. This makes a shape, but the contour of the square can be considered a line. The square could be a particular color being used for a purpose, i.e., for contrast, emphasis or mood. The square could have texture, e.g., rough paper pasted on smooth paper. It is hard to separate the basic elements of art, but an artist must deal with these relationships as a work evolves.

There is nothing in this part of T2's explanation about using the elements with expressive intent; that is, from the above description it is unclear if the artist is making decisions about these matters or if the work in progress is magically determining this. But there were several generalizations T2 presented earlier in the categorized list of elements that indicated artists use these elements to convey mood or meanings or that different effects can be manipulated by the artist. Thus, there also is a cause-effect relationship proposed by T2 among these key ideas about the elements of design.
T3 viewed the relationships among the key ideas listed under Goal #1 in a highly contextual way, as expected, much as an anthropologist would situate or try to understand art as human behavior or a cultural expression. Following is T3's description of how the three key ideas presented earlier are related (elements, symbols, and reasons for communicating with such):

Artists are a part of every culture. Through history the artist and art forms created reflect the values and beliefs of people. Some people prefer to say that art is a record of our civilization. Any art form through history cannot be understood or appreciated if we don't understand the cultural/social context in which it was created. The necessity of studying about cultures in order to comprehend specific art forms demands the time and effort of not only the art teacher, but also the classroom teacher. Together they must work to explore, research, and investigate human behavior (interdisciplinary approach).

All teachers within a school must help students form relationships and work to develop in-depth understanding of man [sic].

Then T3 inserted a figure which drew from the work of Banks (1984), suggesting that culture can be viewed from the different perspectives of a number of disciplinary areas. Any one discipline gives only a partial understanding of culture. The figure depicts a circle surrounded by smaller circles, with arrows pointing from these circles to the center one. The center circle is labeled "culture." The other circles are labeled "science," "social studies," "art," and so forth, or by traditional school subject areas. Contradicting the claim presented earlier that the three ideas were sequential, then, T3 actually saw these key ideas as a large relational network that cut across disciplinary boundaries. The glue or organizing center for these ideas, no matter the discipline, was "culture."

How would teacher experts organize and present the key ideas they generated under Goal #1 to students?
T1 said that students should know, at the onset, that "the lesson deals with elements students see every day. Teach students about symbols initially. This will help to raise student interest." T1 explained further:

Next, tie this into some study of basic elements (choose 2 or 3 to concentrate on). Refer back to the symbols and discuss different categories (graphic, verbal, dreams). View examples of popular artwork and discuss the symbols used. Discuss why artists may have used these symbols. Also, discuss why an artist would want to convey meaning (personal expression, describe society, advertising, create controversy).

Again, T1 contradicted the argument presented earlier that these three key ideas for developing Goal #1 were logically sequential and therefore should be taught in this sequence. For example, instead of beginning with the elements of design, T1 chose to introduce symbols first in order to motivate students to learn about the elements of design and then why artists may want to convey meanings with these. Exactly what T1 meant by verbal or dream symbols as compared to graphic symbols remained unclear.

In a unit of study entitled "Social Functions of Art," T1 suggested that this unit was intended to "make the student more aware of reasons why artists create artwork and that artists often create works for a specific purpose." The unit would consist of the following major topics: art as expression, art as social description, art as advertising, and art as controversy. T1 submitted two sample lesson plans in "Art as Advertising" intended for second graders, with each lesson lasting about 45 minutes. The second lesson was a follow-up to the first for students to complete work begun in the lesson below.

T1's lesson was "A Look at the Art We Wear," and the objectives were as follows. Students would learn

1. how artists create logos, later placed on clothing, to present a certain image of richness, playfulness, durability, etc., by viewing
various clothing items with such logos and discussing what is presented.

2. what thought processes are involved in making their own logos present a particular image by making at least two logos of their own that are indicative of themselves.

3. some pointers on drawing the human face in some degree of proportion, such as making imaginary lines from the eye to find the corners of the mouth, by listening to class lecture, observing drawing on the chalkboard, and then by actually making their own bodies out of butcher block paper.

Evaluation of students' learning and degree of success would be judged by T1 in the following ways:

1. participate in group discussion
2. list different images or values logos represent
3. make logos that seem to represent themselves or their interests
4. try to use pointers of drawing discussed in class when making their own faces and bodies.

First, there was a review of the previous weeks in terms of "social functions of art." Students were reminded of topics covered to that point: expression, symbols, social description. Then students would be introduced to "The Art We Wear" with the following explanation:

If you have noticed, much of our clothing has some sort of logo on it. Does anyone know what a logo is? (Encourage students to respond and figure out the definition for themselves--it may be necessary to help them.) A logo can be a picture or a word or even just a letter. It is something that helps us identify what the product is. For example, when you see an alligator on somebody's shirt, you know it is an Izod.

The teacher then would show examples of logos, such as Polo, Izod, Hunters Run, Coca-Cola, or Orange Crush, and ask students to look around and identify logos on their own clothes. T1 continued with the following:

What can you tell from looking at these logos? Does a Polo cost more than another shirt? Is there any difference between Calvin Klein or Guess jeans? Encourage students to explore as many possibilities as
they can as to what these logos may represent. Are animal logos more effective than just word logos?

Then T1 would introduce the studio activity, which is to make life-size outlines of the students on butcher paper for students to create two logos to put on these drawings of themselves, either on their shirt, pants, or shoes. The teacher would explain to students that "it is up to you to decide what this person is going to look like." Further,

it can look like you, or you can make it look very different from yourself. Consider the hair color, clothes, and pose you want this person to be in. But most importantly, I want you to come up with two logos—one logo for your shirt, and one for either your pants or shoes. Keep in mind these logos should be simple. They could even be your name, but I want the logos you use to tell something about yourself. If you absolutely love basketball, then let me see evidence of that—perhaps a basketball hoop on the shirt.

Before students would begin drawing their logos, T1 would do a demonstration on the board of how to draw the human face. T1 added in the lesson plan: "It is important to stress these aspects, but do not fret over them. It is most important that students understand the logo concept. The explanation of drawing technique is secondary." As students began creating their logos, the teacher would trace the outline of each student take on a sheet of butcher paper. After this was done, students were to add details to these outlines and cut out the body shapes in preparation for the second lesson. There was no "conclusion" or evaluative segment to this lesson.

I presented this lesson in considerable detail because T1's lesson is not a good example of how best to achieve Goal #1, much less how to develop students' depth of understanding about logos, art as advertising, or the "Social Functions of Art" writ large. The lesson is very disjointed, and none of the ideas or teacher explanations are developed well or in any depth. Some of the activities not only
seem like a waste of time but as if these actually would significantly deter students from learning and achieving the objectives. For example, making life-size drawings or learning how to draw a face (however peripheral) distracts from the main points of the lesson, which in themselves are very vague. Further, there is a contradiction in having students draw "any kind of person" but requesting personal logos to put on these images. I failed to see the connection here and suspect that students might be confused, too. Finally, time and attention to developing ideas for logos, discussing what these mean, and how to make them were lost as the teacher spent time elsewhere in the classroom drawing outlines of students' bodies.

While I have no doubt that second graders can make logos, I think the ideas being developed here would require considerable abstract thinking, particularly in terms of how to translate meanings into parsimonious images or designs, as is usually the case for logos and trademarks. Making logos requires not only requires an understanding of design principles and how to manipulate these to achieve particular effects. It also requires figuring out a way to take the "essence" of something (in this case, oneself) and convey this in a visual image. Next, logos on clothing are typically small. Why go to all the trouble of doing outlines of students bodies, drawing faces, and adding details when the thrust of the lesson is on learning about logos as art in contemporary life? Why not just make enlarged designs of these logos (easier for youngsters), say for a t-shirt, and pin these original designs to students' shirts or tops for them to wear? However, I still think the level of abstraction required in this lesson is too advanced for second graders.

It also is difficult to see much evidence in T1's lesson of a focus on the elements of design, the primary thrust of Goal #1. Why some artists make this kind of art is not connected well to contemporary, social context. I find this very
confusing and suspect that making important connections like this would zip past second graders without a concerted effort on the part of the teacher to help students see the connections. For example, do artists want you to buy Izod shirts? Or, what is the relationship here between commercial art and fine art (e.g., personal expression, presented earlier in the unit). No connections are made.

In T1's second lesson, there was a 10-minute review about "how artists use logos to present a certain image of either a product or themselves." Finally, if artists do "present images of themselves," students have had no examples of this in the previous lesson where such a connection would have been very important to make, and no connection was made between this idea and what students have been asked to do with respect to their personal logos. T1 reiterated:

Re-employ the concept "social functions of art." Students should try to remember what they have done each week leading up to this one and how they all related to one another. Each week has been about why artists make art, besides merely making something beautiful.

Thus, in T1's follow-up lesson, how the teacher would help students make these important connections is very fuzzy. Students would "finish adding details" to the life-size pictures and logos begun in the previous lesson.

In the third lesson, T1 would hold a class discussion and "encourage students to walk around the room to see what everyone else has done." They would be asked to discuss their own artwork and explain their logos, along with their interests. The theme of "social functions of art" would be reviewed, as well as how "artists are paid to create a particular image for clothes. In effect, it is a type of advertising. Logos advertise the type of product being sold. This is yet another example of how art functions in our society."

T2 did not submit a sample lesson plan per goal as requested, only one for the whole exercise. (The sample lesson will be presented under Gcal # 3.) T2 did have ideas about how to organize key understandings of the elements of design
under Goal #1, with or without a specific lesson plan. However, the reader is
forewarned that a few of T2's statements appear to have been derived almost
verbatim from Laura Chapman's (1985) K-6 textbook series Discover Art without
acknowledging or referencing this author. I was alert to Chapman's ideas and
language after completing a detailed analysis and critique of this textbook series
(May, 1993). Whenever I sense that Chapman's work is being appropriated, I will
mark T2's statements.

In general, children's ability to perceive and appreciate art is more advanced than the ability to create it. Students need systematic instruction in order to perceive, create and appreciate the visual arts. By utilizing their natural surroundings, by exposure to the art work of mature artists, and the use and understanding of various art media, children develop a sense of continuity and self-confidence.

Basic elements are taught in a sequential manner according to the child's age and abilities. Acquisition of these ideas add words to their vocabulary and gives them tools by which they are able to judge their own efforts. Goals can be set and attained within the framework of each art experience. If mixing primary colors is the goal, then the children will have an evaluation tool if they have been taught that red, blue, and yellow are the primary colors. They will discover what happens when one primary color is mixed with another, and what will happen when they mix all three. After experimenting, they will have a knowledge to be used over and over and shall be able to use this knowledge in other situations. They will be able to evaluate their own color-mixing. Some of the questions the teacher might ask would be: What are the primary colors? What is the purpose of mixing primary colors? What happens when they are mixed? While the child asks himself: Did I follow directions? What went wrong? What would I do differently next time? How could I have avoided a particular problem? How does my paint mixing compare with . . . ? What went right/well? Could I repeat this and achieve the same results? Do I have control? What happens when I vary the amount of paint? The basic elements of art are familiar to most children by school age. "Color within the lines" is a common request by parents and/or teachers as they hand children coloring books or workbooks. Colors are generally known and basic geometric shapes can be learned. They have heard the words lines, shape, and color over and over. Texture is more difficult because it is generally not used in
lower grades. The word pattern is used more often in the lower grades as when a child repeats a wavy line for hair or water and tiny straight lines for grass, etc. As the child matures, texture takes its rightful place and can be discerned in art reproductions, on sculptural forms, and in their own works of art.

Repetition in the use of these key elements is necessary for conceptual understanding. Simple experiences at kindergarten age using felt pens to make line drawings, large brushes for painting, cut paper for shape and color, and poking fingers into soft clay for texture are a few methods taught to foster these understandings. Using these repeatedly in a variety of ways and related to other curricular areas will allow the child a base to build on through the grades.

Utilizing sequential teaching and evaluative strategies through the grades, keying in on the three basic interrelated themes of "Creating Art," "Looking at Art," and "Living with Art"* will result in children having useful knowledge and values to apply to any situation.

Other than "texture" and "pattern," we do not get a good sense from T2's description of exactly what about the elements of design are or should be sequenced over the grades. T2's view of the key ideas under Goal #1 were like a network, not a sequence, so there are some contradictions here. It is easier to see that T2 believes it is very important for students to apply concepts learned (listed under Goal #1) in varying contexts and in multiple ways over time. This is not only in art class but across the curriculum, when and where such relationships can be seen and are deemed appropriate.

One also senses that T2 is an experienced teacher who knows what can be anticipated or expected from students in terms of their prior knowledge and experiences. Many of the sample questions T2 generated for the imaginary student suggested that self-regulated learning and self-assessment should be encouraged with respect to Goal #1 as well as in terms of learning to control media with desired effects. Some of these desired ends are those of the teacher (e.g., Did I follow directions?) Just about all of T2's explanations and examples regarding the elements of design suggest a heavy studio emphasis with little
attention given to art criticism, history, or aesthetics. In other words, for T2, Goal #1 did not attend much to developing student's understanding of art elements in terms of viewing others' art or looking at art in social and historical context. This was despite T2's introductory remarks concerning "exposure to the artwork of mature artists" and "looking at art," "creating art," or "living with art" as three important interrelated themes in an idea art curriculum.

T3 suggested that "no one discipline within a school can cover adequately the depth and complexity of human behavior." T3 believed that all disciplines "have a responsibility to contribute an enthusiasm and effort to help students understand and appreciate their own culture as well as others." Then T3 described the ideal organizational structure for an ideal curriculum:

As a team of educators, we should concentrate on the "immediate" (self, family, school, neighborhood, etc.) with the younger students and broaden the concept of cultures as students get older (historical perspective of their own culture and an in-depth study of other cultures).

Once teachers have agreed on these basic areas of concentration, I believe it is important to rely on the creative ability of each teacher on how best to meet their goals. As an art teacher, I realize that specific techniques and vocabulary must be taught. These formal aspects are taught within a broader context of study. I teach them when a student needs them to better understand the complexity of human behavior and/or a student needs these formal elements as tools to better express or communicate an idea in a visual form. An understanding of artistic tools and vocabulary is the prerequisite for art criticism. The ability to make critical decisions or judgements about our visual environment is a major goal of any art teacher.

T3 then stated, "the artist and art forms that I concentrate on during specific art units parallel a social studies, science, music, language arts... units that will involve in-depth research and study of a particular culture." In the artroom, T3, suggested, discussions about "certain artists and art forms are always integrated with discussions of human behavior."
One key idea T3 developed into a second-grade lesson was: "Art is an object that is integrated with human behavior and must be considered within its various cultures and social context." To develop students' understanding, T3 preferred an interdisciplinary approach to the curriculum and described one example.

In a unit of study, the classroom teacher was helping students develop an understanding of "social groupings" and would be "working on neighborhoods" at this juncture. The librarian read books to students about different communities within the natural environment (animals, birds), and students were asked to discuss why certain materials were used in constructing shelters, why certain animals find shelter in specific areas, and how and why certain species group together. Comparative analyses were made between human and animal shelters, and a filmstrip about the basic shapes and construction methods of a variety of dwellings was shown to students and discussed.

The art teacher invited a local architect to art class and explained his job (function) within the community. He brought in some preliminary sketches for a proposed apartment complex in the city and discussed the shape of the land, the neighboring buildings surrounding the land, and "most importantly, the function of the apartment building," said T3. After demonstrating the technique of sketching and the use of transparent overlays, students were given a design problem for another piece of land within the city. They discussed problems that must be considered before designing a building, such as what function the building would serve and what materials were available for construction.

The classroom teacher allowed students to bring their drawings back to class and complete these over a period of a week. Then students returned to the next art class to critique their designs. The following week, T3 introduced the architectural term "facade" (front face of a building), and students were asked to describe the facade of their homes or apartment buildings. A homework
assignment involved students and their parents in observing the basic shape of their houses and roofs. Students returned to the next art class with their sketches. Discussed were the shape, size, construction materials, and overall design of students' homes. Said, T3, "'Why?' became a major part of our dialogue. Why does an architect design certain styles or 'looks'? Why do homeowners like certain styles or looks?" It was not clear how T3 processed this information or what understandings about this T3 was trying to develop.

Then, students created the facades of their own homes using tagboard, construction paper, markers, and glue. Upon completion, these buildings were grouped together into a neighborhood, with students making critical decisions about the location of their homes in relationship to the land, their neighbors, and so forth. The neighborhood was displayed for the school and given an original name. Several students suggested that cars, trucks, and people were needed to make the community complete and brought in plastic models and "carefully placed them throughout the community."

At the fifth-grade level, T3 described another unit of study where state history was being studied in the classroom. Students were discussing different ethnic groups who had settled in the immediate area, why they had settled there, and how the community had changed since settlement. In art, students viewed and discussed different types of dwellings people had built for themselves in their community. Discussed were traditional ethnic designs brought by students' ancestors and how original buildings had changed since the community began.

Again, a local architect was invited to art class to explain the same design problems as he had for second graders. Designing an apartment building on a specific area of land was discussed. Students questioned the cost, efficiency, and aesthetics of this building, and "they were very concerned about the future tenants of this building. Play areas would be needed for family housing, but sidewalks for
walking and easy access parking would be needed for a senior citizen complex," said T3.

The architect Frank Lloyd Wright was introduced to students, and they viewed photographs of some of his buildings and discussed how the function of each building fit the form. "Our major area of concern focused on the natural environment around each building and how . . . Wright designed structures to 'fit' with the immediate surroundings." As an assignment, each student was asked to redesign their homes to make them more accommodating for all the people who lived there, but at the same time, improve the overall look of the buildings. Emphasis was placed on designing a home that was harmonious with the rest of the neighborhood and natural environment. Outside of class, students were assigned to sketch their homes, making detailed observations on the specific size, shape, and design of these dwellings.

For several weeks, T3 had students construct a miniature model of their renovated houses. They were introduced to architectural terms and design principles used by professional architects. (T3 did not prese... what these were.) Students also visited local art museums that were exhibiting Wright's drawings and architectural models. Students' completed structures were displayed for the school in a community arrangement, and they had to make decisions about the location of each building in relationship to the preexisting community that the second and third grades had begun.

As the culmination of this project, T3 had the entire class observe the completed community and compare this community with their own city. "After a lengthy discussion about the communities, individual students were asked to make an evaluation on how well the new buildings 'fit' together and how well the architectural designs conformed to the natural environment," said T3.
In sum, only T2 discussed what several of the elements in art are to teach in the first place in order to achieve Goal #1. All three teachers tended to view these elements and principles of design as "obvious givens," but highly interrelated, even when two teachers contradicted themselves in suggesting that these must somehow be "sequenced." Just how and by what kinds of criteria remained fairly unclear, except through multiple applications in varied contexts over time, or informally assessing students' prior knowledge and experiences. All of the teachers embedded, if not submerged, studying the elements of design under other goals or outcomes perceived to be more important than studying the elements of design in isolation. First of all, the teachers were very sensitive to artistic intent or potential effects, therefore, rarely severed the study of visual elements or art products from the reflexive context of art making and perceiving (at least from the artist's point of view).

Next, all of the teachers demonstrated a strong interest in studio-related activities and developing individual students' perceptions and manipulation of ideas, not just tools or media. In other words, there was a strong focus on child development, creative expression, and promoting individualism, a pronounced interest in art practice since the 1960s and something that disciplinary experts have tried to deemphasize in the last decade with DBAE. The teachers were as student-centered as they were activity- and studio-centered. Except for T3 (Frank Lloyd Wright), little attention was paid to having students view and respond to great works of art or adult exemplars and the discrete, systematic, formal analysis of elements of design in works of art.

Of the lessons presented by T1 and T3, both were traditional whole-group activities. As described in these lessons, artistic discourse was not articulated well. It seemed that all of the teachers expected much of students in the way of making the important connections the teachers loosely envisioned for students or
that students would make their own appropriate connections. There was little attention (except by superficial repetition in the case of T1) that students would be helped to develop meaningful connections or depth of knowledge in explicit, coherent ways. Many assumptions were made concerning what and how well students understood the elements of design, their use and effects, and what kinds of connections would be made in the greater scheme of things.

Another important clue concerning the lack of teachers' clarity about what key ideas and connections were to be presented, developed, learned, and in what ways was the virtual absence of any explicit forms of evaluation in their lessons. When evaluations were presented, these were loosely connected, superficial exercises and quite vague. If what the teachers wanted students to learn was clear to them, it was not clear as to how they would assess, with some kind of evidence, that students actually learned these things. For example, T2 suggested that once students learn about color-mixing, they will be able to apply this knowledge from then on whenever they needed to mix colors. But nothing was said about when, how often, or how well students would be able to apply this knowledge without the teacher reteaching or reviewing color theory in subsequent lessons. If color mixing must always be retaught (which it usually is), students have not learned these principles in ways that will allow them to apply their knowledge independently whenever they wish, or whenever they have an opportunity to define an artistic goal or problem for themselves.

Finally, all of the teachers emphasized the importance of context. Not only did they exhibit a strong "presentism" and "localism" in their recommended goals, content, and activities for students; that is, they were intent on helping students see the relevance of art in their everyday, contemporary lives. But teachers also preferred making interdisciplinary connections and helping students see connections across artificial subject-matter boundaries typical in the
elementary school curriculum. Again, what connections students actually made across subject areas, if any, were never assessed. The assumption that students do and will learn better, or make connections across subject matter when the subjects are correlated or integrated, is not peculiar to art teachers. It is an assumption made by most teachers who invest in developing "integrated" curricula but who never test out this hypothesis to see if, indeed, students learn more or qualitatively better, and if planning and teaching collaboratively are worth the additional time and effort required.

Only T1 mentioned the importance of a DBAE focus, or covering all four content areas in art, but then only as an additional key feature of an ideal curriculum. What T1 described thereafter skirted the more disciplined and disciplinary approach of DBAE. T3 reflected the strongest interest in the cultural contexts and dimensions of art and an abiding commitment to honoring and addressing students' cultural diversity through the study of art in cultural context. In sum, the teachers' larger but local interests far outweighed the potentially isolated, formal thrust of Goal #1, as presented. Only T2 defined the elements of design as important "building blocks," but these were never treated in isolation. Neither could the other teachers treat this goal in a such a manner. It was submerged in the service of student-centered activities in local context.

Goal #2

Goal #2 was to develop an understanding of the artistic process (choices, decision making, critical/creative thinking) in creating artistic forms with expressive intent (not merely to produce art objects). This goal more nearly reflects an interest in art production or studio art. However, there is explicit interest in what kinds of thinking or dispositions are required in creating art or in better understanding the thinking processes of artists. Experts were asked what
important understandings or generalizations should be developed if students are to achieve this goal.

T1 listed the following key ideas to be developed under this goal and explained how these ideas are related:

1. Artists are continually making choices and decisions with regard to their work throughout the creative process.
2. Artists will oftentimes try to express their feelings/thoughts in their work, rather than merely create artwork that is beautiful.
3. Art does not have to be pretty.
4. Students need to learn methods of art criticism. Edmund Feldman's model seems to be well-suited for elementary-age people.

T1 suggested that all of these areas could be taught independently of each other and "still attain student understanding." However, T1 claimed, "the critiquing process tends to be more effective if students have a clear understanding of the decision-making process." Thus, T1 saw a connection here between making art and art criticism. The Feldman model (if I remember correctly) structures art criticism in a hierarchical sequence: describing what one sees in a work of art (formal analysis of visual elements and their arrangement); interpreting (trying to figure out what the art means or what the artist wished to convey to the viewer); and evaluation (deciding whether or not the artwork is of value, or if it is good or beautiful, and by what criteria or on what grounds). Finally, T1 vaguely suggested that all of these concepts "lead toward a greater understanding of the artist and his/her work." In what ways is unclear; T1 did not elaborate.

T2 listed the following key ideas to develop under Goal #2 and their perceived relationships:

The interpretation of an art assignment might well be different for each individual.
The final product may reflect cross-cultural ideas.

There are many ways to solve a visual arts problem.

Art materials may be used in many different ways to achieve different effects.

Discussions often lead to open-ended ideas/solutions.

Divergent thinking is rewarded.

Brainstorming may mean accepting or rejecting new ideas.

Not all efforts produce successful results.

Comparison with peers may help in understanding new and/or different possibilities.

Fluency of ideas is fostered.

Observation and analytic skills are developed and refined.

T2 proposed that the above key understandings "can be connected by past acquired knowledge, present knowledge, and a willingness [on the part of the student] to acquire new knowledge. Utilizing all three when facing a problem-solving situation will result in greater understanding." When confronted with an art experience, for example, "making art, looking at art, living with art," said T2, "one can only bring to the situation that which is within oneself."

T2 drew heavily on generalized characteristics of creative behavior that have been researched over the years across disciplines, such as fluency, flexibility, originality, elaboration, tolerance for ambiguity, risk-taking, and resistance to closure. Despite T2’s claim that this process is ultimately an individual endeavor or feat, in the list of key ideas T2 implied that conditions for thinking and behaving artistically can be fostered or learned in a group context and/or developed by formal instruction. Whereas T1 connected the artistic process or art-making to formal art criticism, T2 made this connection only to the
local classroom context and/or students' viewing and assessment of peers' images or ideas.

T3 proposed the following key ideas or understandings that can be developed under Goal #2 with respect to the artistic process:

1. An artist must have a "readiness," an intended direction, or an idea to communicate before he/she attends to the art product.

2. An artist is responding [to] or reorganizing his/her environment. He/she can only rely on their own experiences or sense of reality. The artistic process involves an encounter of self and the world, a response, a reaction, and an interpretation.

3. A creative artist must be able to suspend judgment, consider alternative perspectives, accept uncertainty, and be willing to take risks. This preparation to create an art product deals with divergent thinking. During this time, the artist questions, experiments, and explores an idea. Once the artist attempts to rearrange an idea and converge on a hypothesis, he/she may go through a period of incubation. Most artists use sketchbooks or small models to literally play around and think about an idea. Once the artist has made the decision to communicate his/her ideas, the actual art product is created. During the actual creation of an art piece, many decisions about formal elements and principles are made. The artist must ask himself [sic], what is the most effective way to organize and arrange these artistic elements to effectively relate the message that was intended? The actual product is a personal verification of the artist's idea.

4. The artistic process/creative process does not take place within a cultural vacuum. The artist is influenced by his/her cultural values and beliefs.

5. When referring to the artistic process in the creation of traditional art, the aesthetic choices and decision-making process is culturally conditioned. The specific function of each art form is related to cultural beliefs. The organization of artistic elements or use of specific symbols is part of the visual language of that culture.

How did T3 explain the relationships among the key ideas listed above under Goal #2? Again, T3 emphasized the importance of art and artists' function(s) in cultural context(s):
All art serves a function or a combination of functions. The artist, traditionalist, or contemporary, Western or non-Western, must make critical choices in regard to the intended function of his/her creation. The unique, one-of-a-kind art piece is admired in our culture. Artists play with ideas, attempting to avoid a conventional rigid hypothesis.

An example would be Alexander Calder, who used his knowledge of engineering techniques and sculpture to invent the mobile. His simple circular and linear pieces of metal are meant to be nonrepresentational and simply communicate a joy for movement and space.

In comparison to this Western contemporary artist, a traditional artist who is a Haida Indian of the Northwest Coast may carve a totem pole incorporating similar circular shapes, but which communicate the record of history, legends, and adventures of certain Haida people. By using traditional shapes and symbols, all Haida people are able to decode the visual message and thereby preserve their cultural heritage.

In sum, T1 and T2 tended to view the relationship of the key ideas they generated under Goal #2 with respect to artistic thinking or the artistic process in cause-effect terms, with the individual artist in control of his or her visual or technical problem solving. All of the teachers viewed the artistic process as goal-directed, in particular, T3. All saw the artistic process or visual problem solving as a kind of hypothesis-testing, and T1 and T3 even used this term. But T3 thought this view too conventional and restrictive, given the fact that there are different purposes for making art that extend beyond the boundaries an individual artist's desire to engage in free expression. These teachers acknowledged that thinking in art and making art require dispositions, an openness to questions, mistakes, multiple options, possibilities, and outcomes. Artists must be responsive to this fluidity and ambiguity when making their art if they are to achieve their desired ends. T2 and T3 both drew upon dispositions derived from research on creative behavior. For example, T3 also mentioned terms like "incubation" and "divergent thinking." Thus, understandings related to the artistic process are not merely of the cause-effect kind. They require an
understanding of the reflective, reflexive, and recursive nature of bringing one's images to external fruition in terms of a product or art form.

T1 connected Goal #2 to developing students' skills in and understanding of art criticism. Rather than formal analysis or criticism, T3 connected Goal #2 to understanding art, artists, and the artistic process in diverse social and cultural contexts. Thus, T3 made connections that would draw upon art history, but not narrowly from the scope of only modern, Western civilization. T2 acknowledged that students' products may reflect "cross-cultural ideas," but there was no attempt to connect Goal #2 to art criticism, history, or aesthetics external to the immediate classroom (at least, at this point in the Center's exercise). All of the teachers made some implicit reference to aesthetics, not only in terms of the formal analysis of visual elements but also in terms of questions such as what counts as "art" or what is "beautiful." Only T3 suggested that these and other questions in/about art are culturally conditioned or determined.

How would the teacher experts organize and present the key ideas they generated under Goal #2 to students? T1 suggested that students "should first make choices related to how they are going to express a particular idea or emotion. Once they have determined that this expression is complete, they need to critique to discover if they were, in fact, successful."

T1 presented a lesson designed as part of a larger unit of study dealing with sculpture. The unit would progress as follows, according to T1:

1. What does three-dimensional mean?
2. Relief sculpture
3. Sculpture in the round
4. Mobile sculpture/Alexander Calder

As an overview of the lesson plan, T1 submitted the following:

Day 1 Review reproductions displayed around the room and discuss emotions. What kinds of shapes and colors convey particular emotions? Music may help motivate discussion.
Day 2 Lecture
1. What is 3-D?
2. Art that is three-dimensional is called sculpture.
3. What are three types of sculpture?
   a. Relief sculpture
   b. Sculpture in the round
   c. Mobile sculpture
4. Relief sculpture is sculpture that is designed to be viewed
   from a specific angle.
5. Students will create their own example of relief sculpture.

Project Criteria
must use entire piece of 12 " x 18' chipboard
must have a minimum of three different levels of chipboard
(overlap, stack)
may use three colors, including the white gesso
design of sculpture should convey an emotion

Day 3 Students design layout of chipboard, cut, and glue.

Day 4 Students apply gesso, finish glue

Day 5 Students add tempra [sic]

Day 6 Class critique--Does project meet specified criteria?

The focus of the sample lesson plan submitted was on relief sculpture, intended
for grades second through fifth. In the objectives of this lesson, students were to
learn

1. to describe based on Edmund Feldman's process of art criticism, by
   listening to class lecture and by verbally practicing critiquing skills
   on other students' final products.

2. practice decision-making skills by using an exact amount of
   material to create a work that represents a given emotion.

3. learn that artists often create works that express a particular
   feeling by viewing reproductions of Ansel Adams, Vincent Van
   Gogh, and Hughie Lee-Smith, and by creating a work of their own
   that conveys either excitement, fury, anger, or laziness.

The evaluation for this lesson involved students being able to demonstrate the
following:

1. complete sculpture meeting the required criteria
2. work conveys the chosen emotion
3. participate in class critique
In this sample lesson, as in the sample lesson submitted for Goal #1, T1 is rather vague in articulating how ideas are connected within a lesson and from activity to activity or lesson to lesson. The critical point of this lesson, at least in terms of Goal #2, would be how to foster students' understanding of expressive intent. We have no sense of how "emotions" or "expressive intent" were treated in prior lessons, nor how those key ideas and understandings connect specifically to using only the primary colors, white, and black to create cardboard relief sculptures in this lesson.

Using Feldman's step-by-step process for critiquing work, we at least know that T1 attempted to connect a studio activity with art criticism. But we do not know how the evaluation step would be developed in terms of "Is this art?" "Is this good art?", or if technical skill and neatness figure into the evaluative equation. According to T1's key ideas, students were to learn that "not all art has to be pretty." Next, this critique seems to be connected only to the students' finished products. While this isn't a bad focus, there is no explicit connection made in terms of engaging students in this same evaluation process when viewing the art exemplars of adults (Adams, Van Gogh, Lee-Smith). We have no idea if these exemplars are of relief sculptures, the same kind of art form that students will be making. Given the artists named, there seems to be no connection here. Only the "emotions" conveyed in these works ("interpretation" in the Feldman scheme) will be attended to in viewing and discussing these exemplars. On top of this, students are assigned an emotion to communicate in their own relief sculptures, and some of the selections are ambiguous and arbitrary. Would "fury" and "anger" look the same? Is "laziness" an emotion?

Finally, T1's criteria and evaluation are neither explicit nor thoughtfully conceived. How will students' disagreements in the critique be handled? Will
diverse interpretations and evaluations be encouraged, and are their expectations that students must defend their reasons? Or, are there right answers to be ascertained from students' relief sculptures, or are any and all responses correct? Does it matter how students participate in class critique, what they say, and how well they respond to each others' artwork?

As in the sample lesson that T1 submitted for Goal #1, it doesn't seem that the best choices were made with respect to the key ideas or understandings to be developed and the medium and activities selected. Relief sculptures, even painted in color, might be a more successful medium to use in developing some other art understandings than emotions or expressive intent. Whatever the medium, and given the interests of T1, it would seem important that students define the parameters of their own visual problems and potential solutions rather than the problem be designed and constrained by the teacher.

Under Goal #2 focused on artistic thinking and processes, T2 stated that "the degree to which children have been exposed to the decision-making process will determine where to begin." Recall that T2 did not submit a sample lesson plan for either Goal #1 nor #2. But T2 explained:

At the earlier ages, ideas would take concrete form, e.g., when looking at different types of dwellings, compare door shapes, window shapes, roof angles, color, materials used (basic architectural forms).

Older children would compare the style of the dwellings and compare to historic periods, e.g., Colonial, prairie, Greek Revival, Georgian, International, etc. (Architecture is cross-curricular: math, history, social studies).

By using these strategies, children learn how to look, compare and analyze situations, and develop understandings of their meaning. The goal is to develop inquiring minds and dig deep for social and historical implications which leads to the development of personal interpretations and values.

Why T2 shifted suddenly from creative problem solving and individual expression listed earlier under Goal #2 related to artistic processes to perceiving visual
elements in the constructed environment (particularly architecture) and making connections to art history or the social context of art were unclear.

T3 pursued the organization of key understandings under Goal #2 in the following ways:

The specific artist and art forms that I select for an in-depth investigation always relate to the broader concepts being emphasized within the school curriculum. I attempt to help students throughout their elementary years to have a broad understanding and appreciation for the diversity of perspectives displayed by artists throughout the world. Western art as well as non-Western art is equally respected and needs to be appreciated.

The youngest students can learn to appreciate art forms that are part of their visual environment, while older students can broaden their understanding of other cultures by focusing on a variety of art forms from around the world. Helping students "see" similarities and differences among art forms is a part of every lesson.

As a key idea to develop for a lesson, T3 selected the following:

An artist is responding [to] or reorganizing his/her environment. He/she can only rely on their own experiences or sense of reality. The artistic process involves an encounter of self and the world, a response, a reaction, and an interpretation.

T3's overall instructional plan was guided by a particular philosophy. T3 reminded Center researchers, "My method of teaching this key understanding involves not only specific art units, but also an attitude or philosophical belief about art. I believe that art is a part of life. It encompasses an unlimited range of human experiences." Then T3 described a second-grade lesson to illustrate this stance as well as how to achieve Goal #2 in practice:

The classroom teacher is investigating the environmental problems of the community. The class has taken a field trip to the local sewage plant and junk yard.

The librarian has read and discussed two books with the children. One book entitled Sculpture from Junk, and the other . . . Alexander Calder and His Magical Mobiles.

Based on their previous activities and research in the second-grade classroom, my art class attempted to find a creative solution to junk. We had reviewed and discussed briefly the life of Alexander
Calder. The students were very excited to hear that Alexander, as a child, played in the local dump. He loved to create art from anything he could find. He said, "nothing is junk." From metal and wood scraps, Calder was able to create mobiles, animal sculptures, and beautiful jewelry.

An outside assignment given to the second graders was to collect all types of scrap wood and paper pieces. After several weeks of collecting this junk, the students were given time to play with the material and investigate its aesthetic potential. In the beginning, I gave specific directions on rolling, cutting, curling, and folding paper. Then the class was encouraged to experiment with other possibilities. I paid specific attention and recognized any creative solutions. The entire class was overjoyed with the endless possibilities.

As an assignment, each student was given the challenge of creating a sculpture from the piles of curled, folded, and cut paper. After reviewing and critiquing the mobiles of Alexander Calder, the students concentrated on creating simple, spacious sculptures that could move.

The following week, the students were shown several animal sculptures which were created by Calder. By "playing" with scrap pieces of wood, the students were encouraged to arrange or construct an animal form. Challenged by the various shapes of the wood, each student created a unique animal.

The animal sculptures were displayed in the library along with their [students'] creative writing projects, which described the habitat, eating habits, and unique characteristics of each animal.

As a sample fifth-grade lesson for achieving Goal #2, T3 presented the following:

The classroom teacher had been preparing lessons that focused on various forms of human communication. The language arts were emphasized for several weeks. The results of this work were recognized at our school-wide communication fair held every spring.

In the artroom, we had discussed various materials man [sic] has used to scribe or write on through history in order to communicate. Cave walls, clay slabs, and animal hides had been mentioned. I had brought in a piece of Egyptian paper, Mexican amate paper, and a piece of parchment. We had discussed the reasons for the great variety of materials that had been used. The most obvious material, paper, was the last to be mentioned. As an assignment, the students were asked to research the origin of paper.

After researching and discussing the fact that Ts'ai Lun, in 105 A.D., was accredited with inventing paper, we talked about the original function of paper and how it was made. We also talked about the paper products of today and how they differ and are similar to the original form of paper.
In art class, the students were taught the techniques of papermaking. The students spent some time "playing" and exploring different visual possibilities that could be obtained by overlapping layers of colored paper pulp. They were given the challenge of expressing themselves using only paper pulp. As the class period progressed, students discovered that this paper would be molded, folded, ripped, stamped, etc.

Upon completion of this project, we critiqued several contemporary artworks that were made from paper pulp. The students were able to describe in detail what they observed, analyzed and interpreted what the various artists had done, and ultimately made some judgment or statements about the artwork.

The handmade paper was displayed at the communication fair along with poetry, short stories, and creative writing samples.

These sample lessons from T3 regarding Goal #2 are consistent with T3's abiding interest in making art relevant to students and viewing art in cultural context(s). The interdisciplinary connections were defensible in terms of what may be learned in/about art. Art was not sacrificed as a recreational vehicle in learning other subjects, particularly in the fifth-grade lesson. Further, in both lessons, T3 attempted to connect studio art and other subjects of the school curriculum to art history, art in social context, and criticism. However, T3's notions about what would make good art criticism or would demonstrate students' critical understanding of art remained unclear.

It is interesting that both T1 and T3 selected Calder as an exemplary art resource. The issue here concerns what criteria teachers use to select artworks for use in art classes, and what the risks are of repetition or redundancy over the grades or in different school contexts? While multiple encounters with the same artworks is not a bad thing, too much of the same thing is, particularly when there are so many artworks from which to choose as exemplars for instruction. The reader also may have noticed by now that not one female artist made the "hit parade" in these three art teachers' lessons, and the representation of minority artists was scant, if nonexistent (but for T3). Obvious choices were made in terms
of showing reproductions of sculptures when sculptures were being made, but even in T1's case, these exemplars did not reflect relief sculptures.

In sum, the three teachers perceived artistic thinking and processes as embedded primarily in studio activities; that is, making art seemed to be the best place and way for students to develop an understanding of artistic processes and to achieve Goal #2. Little attention was given to assessing or addressing students' potential misconceptions, developing self-regulated learning, metacognitive strategies, or providing them with ways to record and reflect on the development of their ideas, artwork, or skills over a given period of time (e.g., keeping portfolios, writing diaries or logs, engaging in critical activities that featured thinking in progress or decisions made).

Goal #3

Goal #3 was to develop students' dispositions to actively "attend to" and enjoy art for its own sake and to appreciate the diversity of art forms and how artists interpret human experience and the world around them; appreciate art as a form of human inquiry, expression, interpretation of the world. This goal was developed specifically to address learning in/about art in personal, sociocultural, and historical contexts. Again, the experts were asked what important understandings or generalizations should be developed to achieve this goal.

T1 presented the following two key ideas to accomplish this goal:

1. Before students can "appreciate" the diversity of art forms, they must be exposed to many, many different forms of art. Often, our disapproval of art isn't that we don't appreciate it, but rather that we don't understand it.

2. Students must learn not to be so judgmental, or at least slow down the judging process. This can be achieved through continued learning and practice of critiquing methods.
T1 said that these "two processes are directly related and continual. A student must 'see' before he/she can understand, then appreciate." Thus, this teacher saw learning under this goal as a sequential process: seeing, understanding, and appreciating, patterned after Feldman's critical framework for analysis of artworks.

T1 would organize these key ideas by exposing children to multicultural artworks and teaching students "that each culture has its own set of meanings and priorities." Further, T1 suggested that it is not possible to achieve this goal "in one lesson, one unit, or even in one full year of instruction." T1 said, "It takes some individuals an entire lifetime to reach this level of understanding. Therefore, it would be futile to attempt construction of such a lesson." In fact, T1 did not submit a sample lesson to illustrate this goal; rather, T1's Goal #1 lesson on "making logos" was duplicated. However, T1 did suggest that the following kinds of activities or topics would be helpful in developing students' understanding of art in social and historical contexts: museum visits, guest artist or artist in residence, studying the art of various cultures, studying "modern art," and studying religion's influence on the early arts.

T2 generated a long list of key ideas to be developed under Goal #3. Some ideas may ring familiar. However, several of these are provocative examples of key ideas, excellent starting points that would be interesting, worthy areas if extended and developed into units of study.

Works of art sometimes convey different meanings to different people.

Saying "I like" something is a start, but explore the meaning of "I like."

Understanding breeds sophistication.
The more "literal" works of art become the favorites because they are simple to read. Norman Rockwell-style pictures appeal to the masses because they tell an easily understood story.

Learn to recognize the feelings a work of art evokes as an "aesthetic" experience.

Some "experiences" are pleasant, and others may be troubling in a variety of ways.

Throughout history, the cultural, political, social, and economic climate has been portrayed by the artist.

The history of art parallels the history of the world.

The camera revolutionized certain artistic forms and ways of perceiving the world.

Ethical, moral, religious, and political views of societies often have determined the extent to which artists are free to create. (Art can be considered a dangerous political voice.)

Art and artists are not always recognized or appreciated in their own time.

Television and the computer are having revolutionary effects on certain forms of art.

Artistic styles often reflect the cultures and societies in which they are found.

In the past, artistic styles were polarized because of poor communication and transportation among regions and countries. Artistic styles now come in and out of favor quickly because of instant communication and ease of travel.

Objects which are pleasing to the eye and the sensibilities are rarely thought of or monitored on a large scale. Hence, proliferation of signs, buildings of mixed styles, and generally poor design visually ruin an environment.

People generally do not understand why some places are pleasant and others upsetting to their sensibilities. The public is generally poorly educated in the arts. Television has the capacity to revolutionize artistic taste.

Television and computers have brought quality art to more people than ever before.
More people attended museums and concerts last year than attended all sporting events combined.

What kinds of relationships exist among the key ideas under Goal #3, according to T2? Do all the key ideas fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of the ideas form natural sequences along some common dimension? Again we have a list, with some of the above topics or big ideas combined:

The artistic process is not simple.

It is important to continue to learn about art in a historical context and to learn to appreciate the contributions of artists.

It is important to understand why a certain artistic style is appreciated more than another, and why tastes change.

It is important to understand the scope of art in daily life.

It is important to understand the role of art in consumerism.

It is important to understand the cultural, social, and historic role of art.

It is difficult to ascertain T2's perceptions of the relationships among the key ideas above, except that the list seems to encompass larger categories of items from the first list. Below, T2 clustered the key ideas further and elaborated on these, slowly working toward sample lesson plans.

Cluster #1 of Key Ideas:
The more literal works of art appeal to the masses (e.g., realistic portrayal of statues of soldiers were demanded after the Vietnam memorial was commissioned).
Norman Rockwell-like pictures appeal to the general public because they "tell a story."
The term "I don't know anything about art, but I know what I like" is commonly accepted because people have no qualms about "putting down" works of art.
Artists are often looked upon as an elitist group.
T2's Commentary:
The above statements convey an artistic illiteracy which is pervasive across socioeconomic groups. Original art is either absent from these homes or of a sort which is produced for the mass market. Children who come from these environments rarely have any artistic experience during their preschool years or have limited experience consisting of coloring books, copying, or having someone, an older child or adult, draw for them to copy. The child has had little or no manipulation of art tools such as scissors or paint and is usually temporarily disadvantaged in kindergarten.

These and all children need to be brought along slowly with an emphasis on the artistic process and the joy of manipulating and experiencing various art media and the careful evaluation of their own and others' work. These experiences, along with museum visits, art books, slides, and reproductions which are utilized in relation to other areas of the curriculum will provide sequential development for understanding.

Cluster #2 of Key Ideas:
Works of art convey different things to different people.
Recognizing that the feelings a work of art produces in oneself is a unique experience.
Some experiences are pleasant and some may be troubling in a variety of ways.
Communities often do not monitor large commercial areas.
Therefore, an eyesore develops because of poorly designed buildings and advertisements.
The public generally doesn't understand the above implications and why the feel disturbed or soothed.
The public is generally poorly educated in the area of the arts.

T2's Commentary:
Allowing children to openly discuss their artwork is a way to begin communication. Storytelling is a start as children put great emphasis on meaning in their paintings and sculptures. These should be kept as spontaneous as possible and not forced.
Gradually introducing quality illustrations of favorite books while commenting on the artist's interpretation of a particular part of the story will help [students] to appreciate the art of others.
Progressing to slides, reproductions, and art books as the children become more sophisticated and progress through the grades will elicit more thoughtful observations.
Museum and gallery visits with planned programs need to emphasize the relationships of the basic elements of art for each grade level so that there is not repetition of ideas but an elaboration of understanding so that the same works of art may be viewed over and over with increased personal meaning for the student. The emphasis is that works of art may be seen many times and viewed with renewed interest and understanding.
Cluster #3 of Key Ideas:
[The] history of art parallels the history of the world. 
Through history, artistic styles reflect their country of origin or culture. 
Styles were polarized because of poor communication between countries. This happened because of geographic or political boundaries. 
In the 20th century, artistic styles have changed rapidly because of ease of transportation and mass communication. 
Religious belief has had a strong influence on artists from the cave dwellers through the middle ages. 
In various cultures and political times, artists have been hampered and limited in their freedom to create. 
The arts and artists are not always appreciated in their own time. 
Art can be construed as a dangerous political tool.

T2's Commentary:
Children are exposed to various historical events, that is, recent events in their own lives such as a new baby, a wedding attended, a birthday, or past events such as the Declaration of Independence, the Dust Bowl, Depression, or the opening of King Tut’s tomb. Through personal photographs, slides, books, or museum visits, [students] will see that artists have "been there" and recorded in various ways their understandings of these happenings. 
These examples may be used to supplement the understanding of the event or may in themselves be compared and contrasted in an artistic context.

Cluster #4 of Key Ideas:
The camera revolutionized certain forms of art. 
The motion picture changed the scope of art. 
Television added to the change by revolutionizing artistic taste. 
Television has brought more quality art and yet more junk art to more people than ever before. 
The computer is now taking its place as an artistic innovation.

T2's Commentary:
As new things are invented and discovered, the world becomes more complex. Images are flashed before us at an alarming rate. 
Children soak up information like a sponge and love gadgets. 
Sorting out all of this information is a complex task. Teachers are continually required to teach more information each year. 
By using a simplified base for artistic expression, teachers can help to bring order from the chaos of overstimulation. Children need to learn that some things never change. Lines, shapes, colors, patterns, and textures will always be with them. Getting lost in a work of art either by doing or viewing can pave the way for reflective thinking.
T2 did not name these categories of key ideas, unless these clusters can be seen to bear some relationship to the second "short list" of generalizations T2 provided. There are several themes within these clusters and/or running across them: art in contemporary life, developing aesthetic dispositions and informed personal responses to art forms and the natural and constructed environment, technology's influences on/in art, social values and politics in/about art, art in cultural and historical contexts. T2 identifies some provocative issues that could lead to the critical study of art and artists in sociopolitical context. However, when T2 later presents sample units of study, only one or two key ideas from these clusters is selected for developing students' understanding, and the more critical aspects of art learning are virtually ignored. This is unfortunate because these are the kinds of thorny issues that might, over time, better educate an "aesthetically illiterate" public, something which T2 and the other teachers bemoaned or complained about.

In T2's comments, it is evident that attention was given to students' likely prior knowledge and experiences in art and how best to respond to their perceived deficiencies or misconceptions in/about art.

T3 generated the following key ideas for developing Goal #3:

1. I believe that a teacher's attitude about diverse forms of art is all important. When an art teacher understands, respects, and appreciates art forms from a variety of cultures, the students will reflect this enthusiasm.

2. I have already discussed the need to understand the cultural/social context in which an art form was created. A student who has been given a chance to research, investigate, and discuss their own culture as well as others' will appreciate the visual forms of communication of these cultures.

3. "Attend to" a work of art equates to the ability to critique a work of art. The basic process of art criticism involves (a) description (the
ability to focus on the art elements and specific symbolic shapes that are evident within a work of art; (b) analyze (focusing on the relationship these elements and symbols display within the work of art); (c) interpret (applying the knowledge the viewer has about the cultural context of the work of art, he/she should perceive some message or meaning from the work of art); and (d) evaluation (a synthesis or understanding of the work of art). The viewer decides on how well or effective the artist has been in communicating the message. The viewer is actively responding to the message being sent by the artist.

4. A broad range of human experiences have been expressed or interpreted since the beginning of civilization. A comparison among different artists who have commented on similar themes reflects the diversity of mankind [sic].

5. Art forms can be thought of as visual history. They are visual symbols and tangible representations of certain periods of times.

6. In order that a viewer "attend to" or perceive a work of art, the viewer must understand the visual vocabulary of the art form (visually literate).

7. A narrow concept of art will only provide a limited perspective and understanding of art. An art-for-art's sake philosophy lends itself to this narrow concept of art. It basically says that the object, rather than the artist, the observer, or the subject matter is all important. The significance of an art piece is [viewed as] unrelated to the significance of human experience.

8. A better understanding of the context in which an art form was created will help the viewer to question, to ponder, to consider symbols, and to think about the artists who produced these objects instead of dismissing an art form solely as "good" and pleasing or not.

T3 saw the relationships among the above key ideas for Goal #3 as follows. First, "art criticism (actively attending to a work of art) is a technique or strategy" with guidelines for "active involvement with a work of art. However, the investigation, research, and understanding of the cultural context in which the art form was created is equally important." T3 elaborated:

An ethnocentric interpretation of artwork is inadequate. Any appreciation and judgment that is based on the assumption that "good" art has universal and timeless properties and stylistic
qualities across all cultures is a narrow and visually illiterate assumption. Art is not a universal language and must be decoded in order to appreciate and understand the various visual languages.

T3 stated that local artists and various art forms created within the local community should be emphasized in the curriculum when "young students are learning about their immediate environment. T3 elaborated:

Having these young students interact with the local artists can actually help them have a more realistic picture of who an artist is and what they create. Research shows that the direct experience in which any student can observe and question an artists is invaluable. This opportunity would give the older student help in not only understanding who the artist is, but also what he [sic] does, how he goes about solving problems, and how he relates feelings and ideas to a visual image created in a particular media [sic]. This experience would also tend to destroy or circumvent stereotypes based on ignorance or inaccurate information.

Once the students have learned to understand and appreciate the artist and art forms of their own culture, they will have the basis to appreciate and "attend to" the art forms of other cultures. As students get older and are able to compare and contrast forms of art, they will have the connection or avenue to reach out and broaden their understanding for the diversity of human expression.

Throughout every grade level, the basic concept of art criticism is emphasized. It is obvious that the very young student does not have the capacity or ability to comprehend the entire process; therefore, young students are encouraged to describe what they see, feel, smell, touch, and taste. As students' vocabulary and visual awareness becomes more advanced, they spend more class time observing and discussing various forms of art and a bit less time on product-making. The older students are not only involved in art making, but also spend a major part of their art classes analyzing, interpreting, and evaluating works of art. Students will also find the need to research and investigate important material which is essential to understanding the culture of other people.

**Final Comment:** No one lesson, experience, or unit can change an attitude or teach a student to "attend to" a work of art. An appreciation and understanding of a broad range of art forms can only happen after a period of in-depth experiences. I believe that the lessons that I have previously described are examples of the depth and range of experiences that should be offered students during their six years in elementary school.
T3 reflects many of the same interests as those of T2 with respect to Goal #3. There is a strong tendency to start with students and what they are familiar with or the "local" environment or culture, then work outward to larger contexts as students mature. However, T3 presented a formula for art criticism and stressed this more than did T2, even though many of T2's key ideas and clusters of ideas are drawn from art history, criticism, and the study of art in social context.

How would teacher experts organize and present their key ideas under Goal #3 to students?

Recall that T1 submitted a duplicate of the lesson plan submitted for Goal #1. Also, this time T3 did not present a sample lesson plan, even though lessons previously submitted for Goals #1 and #2 accommodated Goal #3 better than those goals for which the lessons were submitted. For the first time in this Center exercise, T2 submitted sample lesson plans and detailed descriptions of activities. Like the other teachers, T2 tended to view developing key understandings in the context of a unit of study, not a single lesson plan.

A key understanding that T2 generated for Goal #3 was: "Throughout history, art has reflected the cultural, social, political, and economic climate. This is such a broad key understanding that many ideas may be pulled from this and enlarged upon." T2 chose to focus on the study of architecture as reflected in dwellings and public and commercial buildings, much as T3 did earlier in a sample unit. T2 also combined this area of study with social studies as did T3.

For a grade 5 unit in American History, T2 first focused on home design and how this reflected "the changing American scene as our country emerged from its infancy in the 1600s to the present day." First, three historical periods and dwellings in each period were explored, along with consideration of geographic, social, and economic factors for each time period and architectural style:
1600-1700  East coast early settlements, including what is now Maine to Florida.
1700-1800  An East coast large city such as Boston, New York, or Philadelphia.
1800-1900  Settled cities in the Southeast, Southwest, and far west such as New Orleans, Santa Fe, and Los Angeles.

Students were divided into six heterogeneous groups based on the teacher's knowledge of who might "work well together (leaders, followers, conscientious, etc.)." Each group would pick a number from a box, the number corresponding to a particular time period. (Since there were only three time periods covered, it was unclear how T2 divided students into six groups.) T2 stated that because "this is a social studies unit, it is assumed that the students will have read a variety of material before this stage of the lesson." There would be printed materials available in the classroom and a variety of books taken from the library during a previous research lesson.

Each group then would brainstorm with the help of the classroom and art teacher. As ideas were formulated, a record would be kept in each group. This could be in the form of lists, sketches, illustrations cut from old magazines such as the *National Geographic*, and so forth. When all materials were gathered by each group, the art teacher would ask students to discuss the possibilities for visual representations, with students "expected to produce the majority of ideas."

According to T2, some possibilities might be:

1. Draw or paint pictures of buildings in a community corresponding to the time period. Cut these out and assemble on a large paper to create a mural.
2. Design a city square (fortress-type architecture with protective wall or other attributes that reflect a particular time period) with buildings constructed from boxes and other found materials. Presumably this could take up a whole table top.
3. Pick an historical event within a particular time period and reconstruct it using the buildings as a backdrop.
4. Construct houses of the period with no roof, utilizing floor plans and furniture of the period.
5. In a 100-year period, show the evolution of architectural styles by drawing or painting each. Example: 3 log cabins, next frame, 3 log cabins plus a church and blacksmith facility, next frame add more elaborately designed dwellings, commercial buildings, etc. This could be done with camera and slide film to show the growth of a community and its evolving architectural styles.

Assuming that all of the research had been completed as above, the class would be ready to begin painting and constructing. The preparation time would require one or two weeks (if social studies was taught one hour each day), and students would have been collecting boxes, wood scraps, cloth, and so forth to use in their groups or to be shared with others. The art teacher and classroom teacher would have assumed collaborative roles, particularly in working with the whole class and small groups’ brainstorming sessions.

The art teacher would arrive to the classroom with a cart of materials and begin a "sharing time as the students present their ideas" and sample materials as well. T2 would ask, "How would this be used for our projects?" Potential responses might be: "We could use this for a mural"; "We could paint a background on this, put it in a three-sided box, and use it as a background for our three-dimensional buildings"; or "We could cut it and use it for the tops of our covered wagons." All materials then would be placed in a central location and desktops prepared with newspaper for starting the project.

As the groups began to work, T2 (and the classroom teacher if available) would circulate and provide clarification for students' questions or "ask supportive questions about [students’] overall plan and also about the techniques of using particular materials."

As the project progressed over several work sessions, T2 would look for the following kinds of evidence that students were developing understanding of the key idea: "first, by the research each student had completed; second, by listening when their ideas are presented to the whole class; and third, by how their ideas..."
were being presented visually." T2 would also be concerned about and hope to observing "good work habits" such as "creative use of new and familiar materials; creative, cooperative problem solving; independent work habits; and care of materials and work pace, including clean-up." Final evaluation would be the presentation of finished group projects in a public area of the school, with the students writing explanatory signs, such as

'Early Settlers' Homes--Early 1600s

Materials might be strong trees, bark, skins, or whatever else was easy to find and plentiful. Life was very hard, and a safe secure dwelling was of extreme importance to the early settlers.

A grade 2 lesson to develop the same key understanding as for fifth graders (above) was submitted by T2. The following kinds of information would be presented to and/or discussed with second graders:

In a community there are different kinds of houses and buildings. There are old and new homes. Some are for one family. Some are for two families and are called duplexes. Some are for many families and are called apartments. There are trailer and mobile homes as well.

Some people live out in the country. Some . . . live near a town or city. Some . . . live in the town or city.

A community is made up of many different kinds of buildings. They are designed for whatever goes on inside of them. An artist called an architect designs them. They can look very different from each other.

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<th>post office</th>
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<th>department stores</th>
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<td>power plant</td>
<td>fire station</td>
<td>office buildings</td>
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<td>water plant</td>
<td>police station</td>
<td>motels and hotels</td>
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<td>train station</td>
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People who live in a community live in a wide variety of houses. People who work in a community work in a wide variety of buildings. Houses are chosen by people because:

1. They like the design (shape, size, color, etc.).
2. They can only afford to buy a certain home.
3. They like living in a town or city.
4. They like living in the country.
5. They have to live in a certain place because of school or a job.
Buildings people work in are designed so that:
1. They can do their jobs well.
2. They can handle the function of their business.
3. They can take advantage of the surroundings such as a river, railroad, and highways.

"When the premise has been established," said T2, "the children should be physically shown their community." They might take a walking tour of the neighborhood or arrange a bus trip for a guided tour of the community.

Students in T2's unit also would be encouraged to bring in pictures from magazines showing different types of homes and public and commercial buildings. Community helpers would be discussed and their work described. Books would be checked out from the library with the help of the librarian showing various architectural styles of homes and public/commercial buildings. "Discussions of architectural styles would center on roof varieties, doors, windows, dormers, porches, garages, materials (size, shape, color, patterns of shingles, wood, brick, trim, etc.)."

During some of the social studies lessons, the art teacher would be present and lead key discussions as to the details of architectural styles and functions of buildings in the community. Either prior to this lesson or as an extended art period, a lesson would focus on how to handle paints and brushes and color-mixing. The lesson on painting house and/or community buildings was described by T2 as follows.

First of all, second graders would engage in a question-and-answer "motivational period" of about 10 minutes. "Because the children have been working on this main idea for several sessions, they will now be given another opportunity to recall and describe their learnings." Students would be asked to describe those things they remember about differences in the various features of a dwelling. Students then would return to their desks and paint one dwelling each.
When several students have finished, the class would be called back as a whole group for another question-and-answer period to discuss other types of buildings in the community. "This will give those children who complete their work at a faster pace the opportunity to go on with the next phase of the lesson; to paint a public or commercial building." The class period would end with both finished and unfinished paintings left out for drying. T2 stated that subsequent lessons would be needed to complete the project. Paintings would be returned for students to add details such as shingles, trim, porches, and so forth because such details cannot be added when the paint surface is still wet. Some students might end up painting several buildings; others, only one. Students then would map out streets and other features of their community on mural paper. These features might be painted or colored with oil pastels or consist of glued-on construction paper.

The final phase would involve students in cutting out all of their buildings and standing around the mural map to discuss where to place their buildings. A rationale for placement and a consensus by the group would be expected. Students could use an actual map of their community as a guide for various neighborhoods, public, and commercial buildings. Students then would glue their paintings to the mural map and paint or draw additional items such as trees, vehicles, and so forth to complete the mural.

T2 said that evaluation would be in the form of self-evaluation as students judge their own work and in peer evaluation as they discussed similarities and differences in technical aspects of painting, architectural styles, and types rendered. The teacher would help students evaluate the mural when hanging it up in the school by asking students questions such as: "Did we accomplish what we set out to do?"; "Did we show that there are different architectural styles and types of dwellings?"; or "Do we understand why this happens?"
In summary, all three expert teachers believed that an ideal art curriculum should possess all the key features outlined at the beginning of this paper. T1 was the most explicit about or amenable to DBAE, even though all of the teachers included art criticism, history, and aesthetics in the key features they added or in the goals and activities they generated.

On first glance, T1 seemed to have "the right stuff" in terms of espousing popular interests and terms (e.g., DBAE, Feldman's scheme for conducting art criticism, social functions of art, using art reproductions as exemplars). But, T1 had a very limited understanding of how to conceptualize big ideas and understandings in art and then organize and teach these in ways that likely would promote students' depth of understanding. From the descriptions and sample lesson plans provided, it seemed that T1 would have difficulty engaging students in meaningful artistic discourse and assessing their understanding. T1's activities were disjointed and the content ambiguous in terms of developing students' understanding, and many assumptions were made about what students would understand and the kinds of connections they would/did make.

In contrast to T1, T2 seemed to have considerable teaching experience or a keen understanding of what students were capable of understanding and doing in art, and why, and how best to organize and facilitate their learning, particularly at the kindergarten-primary level. T2 also generated key ideas and issues that would make potentially challenging units of critical study rarely seen at either the elementary or secondary level in art, but most of these ideas were dropped or ignored in T2's discussion of units, lessons, and activities.

All three teachers were student-centered in terms of wanting to pay close attention to connecting students with art, not vice versa. All had considerable faith in and abiding views about child development, which might have constrained some of the teachers' expectations and activities that ensued from
these beliefs. For example, both T1 and T2 hinted that sensing and describing were reasonable expectations for primary-level students. Comparing, contrasting, and critiquing at this level tended to focus mostly on students' work and whether or not students accomplished the teacher's objectives and had reasonable artistic outcomes. While T1 mentioned using art criticism in the lower grades, it was not clear how well this would be carried off in meaningful artistic discourse or practice.

All of the teachers believed that students should have multiple encounters with artworks and adult exemplars. For T3, it was particularly important that these encounters represent the students' diversity as well as diverse cultures around the world. T2 paid little attention to the study of adult exemplars. Finally, the teachers were student-centered in their presentism; that is, all of the teachers stressed the importance of art in contemporary and popular context in order to help students see the relevance of art to their daily lives and future. All used local artists or resources such as museums or field trips to help students connect real art, real artists, and real life.

Few of the teachers seemed to focus very much on the elements of design; that is, tease these out for exclusive isolated study. Concepts such as these were embedded and treated in multiple, varying contexts over time as part and parcel of any unit or lesson, whenever appropriate. T1, however, treated Goal #1 awkwardly (e.g., having students learn how to draw a face when the objective of the lesson was to learn about logos and creating these). All of the teachers focused considerably on Goal #2 (artistic processes, creative/critical thinking), again providing evidence that, despite all other stated interests in an ideal curriculum, teachers were studio-centered and viewed art as a form of individual creative expression and meaningful problem solving for students. Because of their abiding beliefs about child development and concerted links with the social
studies curriculum (expanding horizons/communities organization), the teachers also suggested that young students learn best by starting with the familiar and doing or engaging in concrete, constructive activities in which they can manipulate ideas, images, and materials.

Finally, all of these teachers worked across the school curriculum, attempting to integrate and make connections with other subject areas, particularly social studies and language arts. Most of these connections were defensible in terms of what was apt to be learned in art as well as in the other subject areas. However, the teachers' approach to this content, whether in art or other subjects, tended to be uncritical and noncontroversial beyond a superficial point (e.g., T1's "commercial art makes us want to buy things"). Some of T3's lessons may have promoted social analysis or critique, but T3 took a constructive, proactive stance on diversity. An uncritical stance was taken with respect to how the social studies curriculum was organized, which seriously underestimates what today's children have been exposed to and what they are capable of learning and understanding, no matter their age.

Also common among all three teachers were their very loose definitions and informal, if not superficial, approaches to assessing students' learning and understanding. While students' art products and technical development should certainly be used as an important means of evaluating student success or their depth of understanding, none of the teachers engaged students in very meaningful, creative forms of assessment (writing logs or diaries, portfolios, small-group simulations, games, and critical dialogue). Few of them seemed to know how to facilitate meaningful artistic discourse that would stretch students' thinking and help them think about their own thinking, except at this related to making art. However, all of the teachers designed activities that relied on students' reading, research, writing, and gaining background knowledge in the
classroom, library, or through other resources. T1 and T2 gave "homework" assignments that involved students in sketching or collecting data to use in some lessons.

One thing that stands out as unusual (in terms of typical art practice and activities) is that all of these teachers presented examples of lessons and activities that used three-dimensional construction, particularly in architecture. Most art activities provided by art specialists involve making two-dimensional art and looking at adult exemplars of two-dimensional art (drawing, painting, collages). Therefore, I wondered if these teachers found architecture the easiest thing to connect to a social studies topic, and had other topics from the goals or examples of interdisciplinary curricula been pursued, would the art products have been so much of the three-dimensional variety?

It is much more difficult to categorize the art teachers in terms of their theoretical orientations than it was for the university experts. For example, T1 espoused an affinity for DBAE as well as student-centered learning but carried neither off very well in planning and practice. There was no clear or well-articulated, conceptual lens that guided T1's work (at least, as described). There were fragments of this and that pulled together in ill-shaped, odd-fitting ways. T2 seemed to reflect a strong developmental orientation, no matter the content or concepts covered.

Although T3 also expressed both developmental and experiential interests, this teacher had a very strong commitment to context, to the cultural and social contexts of art, artists, and students. Had T3 provided examples of art discourse in situ, teaching strategies, and forms of evaluation that stressed "situated cognition" or trying to figure out what students were understanding in/as art in the cultural context of the classroom, I might have identified T3 as a constructivist. But T3 provided few of these kinds of clues and rejected any notion
that knowledge is universal or static or that students might have misconceptions of the sort that would worry some disciplinary purists and constructivists more than others. Given T3's overriding interest in students and their diversity, I would categorize this teacher as an experientialist.

Students' naive theories can be viewed by some constructivists as not only interesting or an important place to start instruction, but also as misconceptions to be undone, overcome, and reconstructed (at least, as experts or purists understand their disciplines to be constructed or bounded). I would call the pedagogical approaches of those disciplinary purists who value "right" conceptions over the diverse viewpoints within their fields as a "kinder and gentler" form of behaviorism.

**Comparative Summary Analysis**

With such a small, selective sample of only five art experts in this study, it isn't wise to make sweeping generalizations about the differences between professors and teachers as distinct, representative groups of experts. It would be more appropriate to highlight their degree of agreement as experts in art. First, theoretical representativeness within groups was sought in the selection of these experts. For example, we chose not to select only those participants who represented one particular view of teaching and learning. Second, experts were sought who had expressed an interest in teaching art for understanding--however they defined understanding beyond rote learning, drill, and practice.

Next, only the views of art specialists are represented here, not those of teacher educators or classroom teachers who also may have an affinity for the arts or special training and expertise in teaching art for understanding. While our experts may argue that teaching art for understanding requires in-depth disciplinary knowledge and specialized training, there are some generalists with
similar knowledge and training who incorporate their art knowledge and experiences into other subject areas and their teaching. Also, there are trained specialists who hardly fit the elaborate picture and pedagogical talents presented by most of the art experts here.

The key features of an ideal curriculum presented to university and teacher experts were developed from a review and synthesis of the literature on cognition and teaching subject matter for understanding. Experts were asked if they agreed with the five features of an ideal curriculum presented to them, to elaborate on any disagreements they might have, and to identify any additional features of ideal curricula which they thought were important and should be included.

All of the experts generally agreed with the key features presented. Of particular interest among most of the experts was developing more depth of understanding in art, helping students to see or make relevant connections (whether drawing from the art disciplines, from other related subject areas, or from everyday life), and attending more closely to students' prior knowledge and experiences. All of the experts viewed art as a distinct, valuable way of knowing. In their key ideas, they pointed out several ways in which art contributes in powerful ways to students' understanding, in particular, in developing creative/critical thinking, students' meaningful applications of art learning in varied contexts and vice versa, and art's connection(s) to life writ large.

While the two professors were fluent in their discussion of "big ideas" and concepts worth teaching, so were the art teachers. However, the professors carved out limited territory in their conceptual framing of art, having made difficult choices about what in art to emphasize and how to present this in order to help students develop a deeper understanding and appreciation of art. University experts acknowledged what they had deemphasized and why and stood firm in
their convictions. However, the teacher experts seemed unwilling to let go of anything that could possibly be thought of as art, taught in or through art, or which they deemed would be meaningful experiences for elementary students to have. Not only was art life itself, particularly contemporary life, art also was viewed as social studies and other areas of the school curriculum. Art teachers simply couldn't isolate themselves nor art as readily as the university experts were able to do. Teachers liked making connections but of a different kind.

P1 chose DBAE as an emphasis but was clearly most interested in Goals #1 and #2, or the elements and principles of design and tutored images that would promote students' problem solving in recognizing and manipulating visual elements and images. P1 was so steadfast in this view that the sample lessons submitted were deemed appropriate for second graders or adults, with only slight modification. This is because P1 believed that knowledge is outside the learner and that most American adults are as illiterate in art as youngsters. Thus, all learners were treated as faceless, ageless novices or blank slates, and there was little effort to assess students' prior knowledge and experiences, even though P1 claimed this was very important. P1 also was concerned that the curriculum be "systematic" and sequenced but never suggested how his/her own scheme would facilitate sequencing or only lead to redundancy and a rubble of art elements disconnected experiences over the years.

Art was viewed as a universal, stable, visual language to be decoded, no matter the diverse exemplars that P1 thoughtfully would have included in each and every lesson. All art objects had an internal logic or syntax, a meaning to be derived (not imposed), just as P1 stressed that all lessons must have a coherent design and a particular logical form to promote teaching/learning art as problem solving. Problem solving was viewed as hypothesis-testing, borrowed from the sciences, and these problems were carefully defined and controlled by the teacher.
in ways to diminish extraneous or intervening variables (such as imagination) that might hinder what P1 wanted students to learn. What would have been learned would have been low-level facts, recall, recognition, identification, and visual analysis of art elements with little creative or critical thinking. What one could observe in the resulting tutored art images produced by students would be proof in the pudding for P1, tangible evidence of what students had learned and how well.

Despite being a DBAE advocate, P1 paid little attention to expressive goals and outcomes, individual interests or the needs of diverse learners, or to art in social, political, or cultural contexts. Art objects were there for the viewing, to be selected, dissected, and used as comparative exemplars to learn the elements and principles of design. Whatever P1 might claim to be, the territory P1 carved out for himself/herself and its terrain looked like a "kinder, gentler" behaviorism under the guise of problem solving and DBAE. A lesson plan segment designated as "historical/critical analysis" does not mean that this will occur or that students will learn how to do this well--at least, in defensible ways beyond exposure to art reproductions.

P2 carved out similar subject-centered territory, but the terrain was quite different from P1's. Like P1, P2's vista matched the practical routes and landscapes offered in sample lessons. There was internal consistency. P2 knew who he or she was, why certain choices had been made, and to what potential effects in terms of developing students' depth of understanding in art. Recall that for P2, the primary purpose of art education is to foster student understanding of works of art. While P2 meant this literally, or that student understanding would be developed by comparing and contrasting art exemplars or art objects, I would suggest that "work" also meant the modes of art inquiry other than studio which P2 proposed and promoted. In other words, there are different ways to "work at"
understanding works of art, and for P2, these were modes of inquiry that art historians, critics, or philosophers use. Art making or studio was used as a complementary vehicle for carrying out some aspects of this "work" or inquiry.

Yes, P2's interest in studio, criticism, aesthetics, and history reflects DBAE interests. But unlike most DBAE proponents who only know how to add, P2 successfully integrated these disciplines rather than awkwardly insert lesson segments by those names into studio activities. P2 accomplished this integration by using a flexibly wide, comparative lens in the first place and for all lessons, with "meanings" as a critical component or derivative in all objectives, equations, and outcomes.

Further, P2 insisted that this working at understanding works of art had to occur in "relevant contexts." By this, P2 meant finding a means of relating students' personal viewpoints to broader frames of reference (from individual to group, sociocultural, and universal). Thus, P2 broke the choke hold of developmental psychology in favor of developing students' conceptual/procedural knowledge and cognitive strategies in the context of defensible modes of art inquiry in comparative contexts. You need not wait until 11th grade to learn how to inquire in meaningful ways in art.

So, while P2 also claimed that one sample lesson at one grade level could be adapted easily to another, P2's lessons required motivation: objectives and activities deemed appropriate for the particular learners, and all the lesson segments cohered in interesting ways, including criteria being stated clearly for each objective and activity for evaluative purposes. The comparative framework required the teacher to be clear about the key ideas and how to engage a particular group of students in inquiry about these ideas, and in varied ways throughout the lesson or unit. This was not the familiar format of traditional art lesson plans: presentation (question-answer) with viewing art reproductions or examples,
demonstration, studio activity, and clean-up with a faint nod to critique or evaluation, if any at all. Further, the lessons required much from the teacher in terms of researching relevant contextual information about artists and artworks given one guiding objective, the selected key artwork and comparative exemplars, and the overarching comparative framework directed at making meanings, not art products.

Next, when reviewing P2's sample lessons and activities, one will note that there are numerous opportunities for students to generate their own questions and reasoning in varied contexts, groupings, and activities. This would require considerable teacher knowledge, art knowledge, knowledge of students and how to facilitate their emergent questions and responses in meaningful discourse, and pedagogical flair. However, this would not be the case for P1's transportable lessons across ages and grade levels. P1's lesson plan format is so parsimonious and segmented that desirable connections could never surface because they weren't called for in the first place.

Finally, P2's sample lessons demonstrate many occasions and ways to evaluate students' learning-in-process based on the modes of inquiry identified, not just by their art products. Well-developed art discourse figured prominently, even in P2's lesson plans; little of this was evident in P1's lessons except for teacher talk or direct presentation of information. P2's approach to art content, teaching, learning, and assessment reflected a strong constructivist approach to art, an interest in developing students' cognitive strategies in processing information and constructing their own knowledge in light of art experts "shared knowledge" and modes of inquiry in which to apprentice.

The two university experts in this study could be categorized as subject-centered, but all of the teacher experts were quite student-centered. T1 was committed to teaching something more than studio in art classes, but these ideas
were not developed much beyond rhetoric. T1 claimed to be a proponent of DBAE (like P1 and P2), and T1 had adopted a formulaic approach (Feldman’s scheme) to lead students in art criticism on occasion. (P2’s preservice teacher used this same format as well in parts of a lesson.) But T1 did not know how to carry this off very well nor how to integrate these diverse interests and content areas in coherent ways that would develop students’ understanding in art.

There were many inconsistencies and contradictions in T1’s lesson on logos, fragmented activities that missed the mark not only in terms of articulating and carrying out the objectives but also in terms of anticipating what second graders likely would be able to understand and do. I don’t doubt that the students had a good time making logos and life-size figures to put them on, but one does wonder what they really learned about “the social functions of art” and commercial art. Next, examples of potential art discourse were very weak and inarticulate. T1’s forms of assessment were shallow, anchored more to things like participation and product outcome than to conceptual learning. This is because the conceptual kinds of objectives had little clarity or depth in the first place, and these were not developed well in the activities or across lesson segments.

At heart, T1 was more of an experimentalist than a developmentalist and, despite all DBAE claims, was very concerned with relevancy, students’ independent thinking and problem solving, and art’s expressive or communicative potential, particularly in contemporary, popular context. The irony here is that because of the conceptual confusion (or perhaps little teaching experience, should this have been the case), T1 both overestimated and underestimated what students are capable of learning and understanding in/as art. For example, “the social functions of art . . .” is not a poor key idea. What might have helped would be to compare and contrast two very different kinds of
social functions of art in the same lesson(s) to add depth as well as breadth. But I suspect T1 would not have known how to accomplish this without resorting to assigning half of the class do X, and the other half, Y.

I viewed T2 as a developmentalist despite all the marvelous key ideas generated and clustered under Goal #3 and a strong interest in developing students' independence in creative problem solving. While T2 may understand these key ideas listed under Goal #3 and find these very interesting, these were not pursued with students as important, critical ways of knowing. T2 viewed the elements of design (like T1) as important building blocks, but these were embedded in lessons and addressed whenever T2 thought the time and occasion called for them.

T2 spoke quite a lot about students' "readiness" and age-appropriate activities, students' prior knowledge and experiences, and sequencing their learning through the grades, particularly in integrated curricular units with social studies. While the sample lessons reflected some small groupings of students, most of T2's lessons were whole-class presentations. While T2 asked several open-ended questions in terms of students making choices about media or materials, many of the evaluative questions were closed or forced choices (e.g., yes-no, or "Did we accomplish what we set out to do?") Other samples of discourse suggested that T2 might ask a lot of recall questions, drawing on students' observations and experiences to set the stage for lessons and studio activities.

While T2 thought criticism, history, and aesthetics were important, DBAE was never mentioned, and little attention was given to these areas, except perhaps in an integrated curriculum unit with social studies. Like T1, T2 was very interested in art in contemporary context. There was little evidence that T2 would be showing many art reproductions or having students analyze or discuss these at any length. (T2 suggested several times that students would benefit by visiting art
T2's instruction focused primarily on studio activities, and many of the pointers T2 disclosed reflected an interest in students' encountering different media in thoughtfully planned ways, their following directions, and developing control and skills related to manipulating art tools and materials to achieve desired ends. T2 would encourage individual, diverse outcomes and creative solutions as long as these were within the parameters of T2's objectives.

T3 also was student-centered and, I would suggest, an experientialist. But T3 was not an experientialist of laissez-faire progressivism. T3 had a clear, articulate, abiding concern for cultural context, student diversity, and cognitive pluralism, if you will. T3 conceptualized art knowledge as problematic, reflexive, and culturally determined, not bounded by arbitrary disciplines. T3 was concerned about the role of the teacher in making curriculum decisions, whose knowledge counts, the teacher as mediator of knowledge and experiences, and teaching in a manner that would foster students' understanding, tolerance for differences, and appreciation of art in social and cultural contexts. T3 was skeptical of DBAE and concerned about its potential to define art only in universal, decontextualized terms (e.g., present only white Western art and artists to students).

"Culture" was the hub of T3's conceptual framework, though students fit centrally inside this hub. T3 was consistent throughout this exercise in articulating this conceptual framework and very concerned that the "psychological environment" of the classroom foster students' individuality and creativity. With respect to developing students' understanding and helping them make connections, T3 said, "A teacher must understand the students' sense of reality in order to make these connections." (Note, the word "knowledge" was not used.) T3 was concerned about the future and preparing students to cope with a complex world. T3 was insistent that art exemplars and activities include non-
Western cultures and their art, beginning with the representative cultures of the students and the local community.

T3's sample units or lessons were interdisciplinary, supporting the claim that there are many ways to study human behavior in cultural context. The sample unit on "social groupings" was very similar to T2's lesson on dwellings, similar resources were used, and the unit evolved in much the same way. In keeping with T3's interest in context and a people-centered approach to learning, T3 used real people (other than the librarian or classroom teacher) to engage students in dialogue and "apprenticing," if you will, such as the architect's visit or asking parents to help with a sketch for a homework assignment. Knowledge was viewed as a social construction accomplished as much through conversation, stories, and social relations as by making art. Calder and Wright were presented as real people who had childhoods and early interests in art. They were not just famous adult artists.

T3 asked several good "Why?" questions in one lesson, but we have little idea from the teacher's description how well art discourse might have been developed with students. Much of the lesson seemed to have emerged, rather than having been prepackaged and prescribed. Interestingly, T3's lesson plan was not a "plan" as such, or a format with fragmented parts. T3 wrote narratively and contextually about how teaching and learning occurred in the classroom. While T2 wrote narratively as well, T2 generated and inserted lengthy lists of declarative statements. Evaluation for T3, like the other teachers, was loosely defined, an unobtrusive effort to review the group's accomplishments. For most of the teachers, evaluation was informal, intuitive, not articulated well, and loosely connected to whatever it was they wanted students to learn.

Other than by theoretical perspectives drawn from educational psychology or curriculum, art experts' views can be arrayed by their explicit orientations to
knowledge (as expressed) or by their implicit theories embodied in their
discussion of goals, content selection and organization, teaching-learning
processes, and evaluation. No professor or teacher works without a lens or a
theory in/of practice. Some simply are better at articulating their beliefs and
defense of these than are others. Although most experts waffled among
perspectives and contradicted themselves (as we all do in the context and
contingencies of real life), their positions, drawn from the salient themes and
interests presented in this exercise, could be located on a continuum as illustrated
in Figure 10.

<table>
<thead>
<tr>
<th>Knowledge as Received</th>
<th>Knowledge as Reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Control</td>
<td>Internal Control</td>
</tr>
</tbody>
</table>

![Figure 10](image)

**Figure 10.** Theoretical perspectives of the experts.

Theoretical differences among the university experts and teacher experts in
this study are presented in Figure 10. Unlike the music expert study (May, 1990)
where both professor and teacher interests arrayed across the theoretical
continuum, the art experts in this study noticeably parted ways, with professors
on one end of the continuum and more subject-centered, and teachers on the other
end, more student-centered. (Again, this may be an effect of subject sampling.)

The continuum reflects views of knowledge and practice in terms of
whether one sees knowledge primarily as "received" or "reflexive" (Eggleston,
1977). Persons who view knowledge as *received* see it as an external body of
preconstructed information and skills which can be transmitted to others rather unproblematically with a great deal of modeling, skill, and practice. "Cultural literacy" advocates represent this view. The great ideas and works of Western civilization are to be handed down to each new generation, ignoring the problem of which of these vast works are to be handed down, why, and to whom, and which ideas (particularly from other diverse cultures) are to be ignored or omitted. Viewing mathematics as a set of fixed rules and algorithms to be learned and repeated, and not questioned or theorized about, is another example.

Believing that the words and terms we use have fixed, well-understood, or shared unarbitrary meanings is an example of the received view of knowledge. Viewing curriculum development or critical thinking as a hierarchical, linear sequence of prescribed steps and skills also represents this view of knowledge. Viewing history as a chronology of dates and events with simplistic claims of cause-and-effect hardly allows understanding history as some group's narrative, one's own biography in social context, continuity, or multiple but plausible interpretations of past events due to rival evidence and the different interests and world views historians bring to bear on their work.

Persons who view knowledge as reflexive see it more as a personal and social construction in constant formation, a dynamic interaction between teachers and learners who impose their own meanings on that which they encounter and bring to a particular context. Given additional attention to knowledge in social, historical, and cultural context, knowledge is made problematic--not only for the learners but for the teachers as well. Selecting what is most worthwhile to teach and learn is no easy task or decision. Such decisions are pragmatic as well as moral choices.

From the reflexive viewpoint, knowledge also is made problematic for the discipline; that is, disciplinary knowledge is seen to be in constant formation and
revision, relational to other disciplines or ways of knowing in sociopolitical and historical context. For example, the economic and political theories of social Darwinism (and subsequent policies and practices) were made possible or partially influenced by theories of evolution and natural selection in natural science, the public's access to Darwin's published ideas, and public as well as scholarly debates. "Mental discipline" or "faculty psychology" at the turn of the 20th century also was influenced partially by knowledge construction/theories in other disciplinary areas and in the broader social and historical context of this theory's time.

Therefore, those who view knowledge as reflexive, view it as mutually produced and reproduced within and across social institutions and disciplinary boundaries in historical context. They view it as reflexive between individual biographies/experiences and the social contexts and webs in which individuals find themselves inextricably linked. In schools or classrooms, reflexive thinkers acknowledge this perpetual tension, fluidity, and interplay--not only as "the way it is" in the world, but as a healthy way to construct personal and shared meaning(s).

Referring back to Figure 10, in this study P1 and P2 most represented a "received" view of knowledge because of their focus on art as a discipline or subject matter. P2's use of adult modes of inquiry in art history, criticism, and philosophy reflect this view as does the use of art exemplars and "shared knowledge" about their meanings and significance. However, P2 was careful to require considerable diversity in the selection of these representations as well as their potential interpretations in a comparative framework. P2's conception of "meanings" to be developed would actively involve students in the construction of meaning, and not all were expected to arrive at exactly the same meaning.
However, P1's conception of meanings to be derived or images to construct was much more rigid and prescribed.

Of the teachers, T3 most represented the "reflexive" view of knowledge. What was to be defined as knowledge was fluid and open to question. Further, whose knowledge counts was of considerable concern to T3. The other two teachers held tenaciously to developmentalism or something in between, and all three teachers were more student-centered than subject-centered. Disciplinary boundaries were not a deterrent to the teachers, and they were very interested in helping youngsters make meaningful connections (whatever these might be) across subject matter and the artificial abyss between school and life. P1 and P2 rarely, if ever, spoke of context or relevance in these terms as did all the teachers.

Table 3 reflects a summary of some of the major similarities and differences between the two university experts and three teacher experts with respect to how they viewed context, content, teaching, learning, and evaluation in art. It is refreshing to see so many diverse ways of thinking about an ideal curriculum and/or ideal practice reflected within and across these two groups. First, it is doubtful that we will ever nail down "ideal" practice once and for all. Second, there always will be debates about what counts as worthwhile knowledge and experiences in art or any other subject area; that is because people will always have different values and interests, within and across disciplinary areas, between academe and public, local, or vernacular knowledge. But questions obviously arise as to why there are rather significant differences between these two groups of art experts, small purposeful sampling or none.
### Table 3

**Major Similarities and Differences Between University and Teacher Experts**

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>UNIVERSITY ART EXPERTS</th>
<th>ART TEACHER EXPERTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Past</strong></td>
<td>Art as a single discipline</td>
<td>Present (and future for T3)</td>
</tr>
<tr>
<td><strong>Art as multiple disciplines:</strong></td>
<td>Art as a school subject</td>
<td>Art as additional subjects: criticism (formulaic), history, &amp; aesthetics</td>
</tr>
<tr>
<td>Art history, criticism, aesthetics with studio as a vehicle</td>
<td>Art production in social context</td>
<td>Art as personal aesthetic experience</td>
</tr>
<tr>
<td><strong>Modes of art inquiry</strong> (P2)</td>
<td>Interdisciplinary contexts and applications to make connections</td>
<td>Art in everyday life</td>
</tr>
<tr>
<td><strong>Varied art contexts for application of art knowledge</strong> (P2)</td>
<td>Art in multicultural contexts (T3)</td>
<td>Art in students' cultural contexts (T3)</td>
</tr>
<tr>
<td>Art in global context</td>
<td>Art in students' cultural contexts (T3)</td>
<td>Art in museums</td>
</tr>
<tr>
<td>Adult expertise/work in art</td>
<td>Art class, regular classroom, school displays to teach others</td>
<td>Art at home as homework (T3)</td>
</tr>
<tr>
<td><strong>Art class</strong></td>
<td>Art in local community</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>UNIVERSITY ART EXPERTS</th>
<th>ART TEACHER EXPERTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DBAE or art production (studio), art history, criticism, &amp; aesthetics (P1)</strong></td>
<td>DBAE (T1)</td>
<td>Studio activities with some history, criticism, &amp; aesthetics (T2 &amp; T3)</td>
</tr>
<tr>
<td><strong>DBAE with emphasis on integrating art history, criticism, &amp; aesthetics with studio as complementary (P2)</strong></td>
<td>Culture or human behavior (T3)</td>
<td></td>
</tr>
<tr>
<td><strong>Elements &amp; principles of design (P1)</strong></td>
<td>Elements &amp; principles of design embedded in studio activities</td>
<td></td>
</tr>
<tr>
<td><strong>Works of art or art objects (P1 &amp; P2)</strong></td>
<td>Art products (T1 and T2)</td>
<td></td>
</tr>
<tr>
<td><strong>Comparative exemplars by style &amp; period (P1)</strong></td>
<td>Cultural artifacts and expression (T3)</td>
<td></td>
</tr>
<tr>
<td><strong>Comparative exemplars by style, period, gender, ethnicity (P2)</strong></td>
<td>Interdisciplinary topics/themes</td>
<td></td>
</tr>
<tr>
<td><strong>Apolitical, value-neutral</strong></td>
<td>Contemporary, vernacular, commercial art as well as fine arts</td>
<td></td>
</tr>
<tr>
<td>&quot;Shared knowledge&quot; of experts (P2)</td>
<td>Some famous exemplars, multicultural</td>
<td></td>
</tr>
<tr>
<td><strong>ORGANIZATION:</strong></td>
<td>Aesthetics in terms of personal response; attention to feelings</td>
<td></td>
</tr>
<tr>
<td>&quot;Systematic,&quot; undefined (P1)</td>
<td>Apolitical, noncontroversial (as presented to students)</td>
<td></td>
</tr>
<tr>
<td><strong>Comparative analytical framework focused on &quot;meanings&quot; (P2)</strong></td>
<td><strong>ORGANIZATION:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Discrete lessons (P1)</strong></td>
<td><strong>Units of study that cohere by topics or themes across subject areas over time; not discrete lessons (T2 &amp; T3)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Coherent units developed around a key artwork, comparative exemplars, and comparative focus of choice (P2)</strong></td>
<td>Activities and projects</td>
<td></td>
</tr>
<tr>
<td><strong>Sequencing developmental, but vague (P1)</strong></td>
<td>Sequencing based on developmentalism and complexity of media/tools; no attention to redundancy</td>
<td></td>
</tr>
<tr>
<td><strong>No attention to sequencing school curricula or potential redundancy; conceptually, novice-to-expert (P2)</strong></td>
<td>&quot;Expanding horizons/communities&quot; when linked to social studies or language arts</td>
<td></td>
</tr>
<tr>
<td><strong>Traditional lesson format (P1)</strong></td>
<td><strong>Creative lesson format, extended (P2)</strong></td>
<td><strong>Narrative storytelling (T2 &amp; T3)</strong></td>
</tr>
<tr>
<td>TEACHING</td>
<td>Learning</td>
<td>TEACHING</td>
</tr>
<tr>
<td>----------</td>
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<td>----------</td>
</tr>
<tr>
<td>Direct instruction, tutoring students' images (P1)</td>
<td>Restricted problem solving with prescribed, uniform art materials (P1)</td>
<td>Direct instruction, telling, facilitating collaborative planning/teaching with colleagues and support staff</td>
</tr>
<tr>
<td>Defining &amp; controlling limitations of a specified visual problem (P1)</td>
<td>Aesthetic scanning (P1)</td>
<td>Apprenticing students in studio</td>
</tr>
<tr>
<td>Apprenticing students in modes of art inquiry (P2)</td>
<td>Decoding visual images (P1)</td>
<td>Expanding students' attention to interdisciplinary connections</td>
</tr>
<tr>
<td>Focusing students' attention in multiple, integrative ways on art objects (P2)</td>
<td>Making an art object (P1)</td>
<td>Exhibiting student artwork in school</td>
</tr>
<tr>
<td>Developing, situating art discourse (P2)</td>
<td>Viewing art objects with modes of art inquiry to develop meanings in/about art (P2)</td>
<td>Lesson segments and activities that do not necessarily cohere</td>
</tr>
<tr>
<td>Researching to develop contextual information for comparative analysis; developing units &amp; lessons that cohere &amp; integrate modes of art inquiry (P2)</td>
<td>Questioning (P2)</td>
<td>Formulaic discourse (T1)</td>
</tr>
<tr>
<td>No attention to learner diversity within groups or in different school contexts</td>
<td>Giving reasons (P2)</td>
<td>Conversational discourse (T2 &amp; T3)</td>
</tr>
<tr>
<td></td>
<td>Comparing/contrasting using contextual information and art objects (P2)</td>
<td>Locating resources, guests, arranging fieldtrips (T2 &amp; T3)</td>
</tr>
<tr>
<td></td>
<td>Inferencing (P2)</td>
<td>Selecting artworks as examples</td>
</tr>
<tr>
<td></td>
<td>Evaluating (P2)</td>
<td>Researching content taught in other subject areas (social studies)</td>
</tr>
<tr>
<td></td>
<td>Age-independent learning with only slight modification (P1)</td>
<td>Attention to learner diversity in terms of age, skills, experiences (T2 &amp; T3)</td>
</tr>
<tr>
<td></td>
<td>Age-independent learning, with some attention to prior knowledge (P2)</td>
<td>Attention to learner diversity in terms of culture (T3)</td>
</tr>
<tr>
<td></td>
<td>Making &amp; discussing meaning(s) (P2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art talk, reading, writing, viewing, simulations, games, worksheets as well as making art (P2)</td>
<td>Creative expression within parameters</td>
</tr>
<tr>
<td></td>
<td>Making art according to T's specs (P1)</td>
<td>Seeing relevance of art in everyday life, personal context</td>
</tr>
<tr>
<td></td>
<td>Following directions (P1)</td>
<td>Seeing relevance of art in own culture and other cultures (T3)</td>
</tr>
<tr>
<td></td>
<td>Whole-group activity (P1)</td>
<td>Personal feelings, meanings, &amp; interpretations as aesthetic experience</td>
</tr>
<tr>
<td></td>
<td>Individual, small-group, whole-class activities in single lessons (P2)</td>
<td>Learning from other local, resourceful adults (librarian, artists, parents)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Application of art knowledge to nonart contexts (other subjects, understanding art in contemporary life)</td>
</tr>
<tr>
<td>EVALUATION</td>
<td>Product outcome according to teacher specifications (P1)</td>
<td></td>
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<tr>
<td>------------</td>
<td>----------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>End of lesson, tacked on (P1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multiple forms in variable art contexts or activities throughout lesson tied to key idea(s), focused on developing &amp; assessing student understanding of key ideas and meanings made (P2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art discourse, reading comprehension and interpretation, writing, simulations, open-ended responses on worksheets and when viewing art, providing evidence and defense in analysis &amp; evaluation (P2)</td>
<td></td>
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<tr>
<td></td>
<td>Comparative evaluation of student art &amp; exemplary artworks in terms of meanings constructed and analytical frame of reference used (P2)</td>
<td></td>
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<tr>
<td></td>
<td>Approximation to experts' modes of inquiry and results (P2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Feldman's criticism incorporated in comparative context (P2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Noncontroversial, apolitical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Despite comparative focus, potentially decontextualized</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No &quot;tests,&quot; grades</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No journals, diaries, portfolios</td>
<td></td>
</tr>
</tbody>
</table>

|            | Product outcomes reasonably unique & successful as a group |
|            | Informal, intuitive by teacher                            |
|            | Rarely tied to clear objectives or key ideas, even when eval. presented |
|            | Repetition of simple objectives without extension/elaboration |
|            | End of lesson, tacked on if used                          |
|            | Achievement/success defined as much by students as teachers |
|            | Cooperation, participation in activities                  |
|            | Handling of materials/tools                               |
|            | Following directions (not all Ts)                         |
|            | Assumption that students make connections to other subjects & to life |
|            | Assumption that students can't understand art in political/historical context until older or without connections to other subjects |
|            | Feldman's format formulaic when used; weak art discourse (T1 & T3) |
|            | Art appreciation a lifelong endeavor                      |
|            | Uncritical aesthetics & criticism; always focused on looking for the positive; controversy avoided |
|            | No "tests," grades                                       |
|            | No journals, diaries, portfolios                          |

Plotting people's interests in the sparse, dichotomous manner of Figure 10 immediately suggests that one group's interests and approaches must be "better" than the other in terms of fostering student understanding in art, and that this then suggests we must choose the "best" between the two groups. However, I'd like to suggest that what is perceived as "best" is open to the readers' interpretation and interests. I'd also like to emphasize that both professors and teachers have much to offer in helping us better understand and articulate what should be taught and learned in an "ideal" art curriculum, how, and toward what ends.

I could pursue the obvious: that the nature and place of teachers' work requires different things and makes different demands on them than is the case
for university professors. Or, that the motivating forces and dispositions behind choosing school teaching or the professoriate in the first place are quite different. Or, that art teachers historically have been in a precarious, marginalized position in elementary schools compared to their generalist counterparts. Or, that the bulk of art teachers' preparation in universities is in studio art, not in art history, aesthetics, or criticism. Or, that university professors don't get out much in schools. Or, that art has never mattered all that much in the United States, at least when it comes to public education or when people seem most concerned with economic conditions and competitive ends.

Instead, I will take quite a different tack by closing with the suggestion that art teacher educators and art teachers need to focus their energies together in the near future on the following kinds of questions. These questions glared back at me when I reflected on the findings of this study.

1. What counts as a "big idea" in art that would warrant and rivet students' attention or be worth pursuing in considerable depth and from a variety of angles within art, without making interdisciplinary connections at the moment? How can these big ideas be so rich, thick, and potent that they would require sustained investigation, a variety of creative methods of inquiry in art classes, and a more critical attitude on the part of art teachers and students in wrestling with these big ideas?

2. How can we make a "big idea" more visible in our paper curriculum (unit/lesson plans) without resorting to written tedium? What creative formats can we generate, other than old lesson plan formats and box calendars, that will keep a "big idea" in the foreground of our planning and teaching and visible to students in their learning, questions, activities, and evaluation?

3. Other than focusing on art objects as the figure and all else the ground, or focusing primarily on making art objects or comparing/contrasting others' art objects, are there other interesting, worthwhile foci of attention for art education? What kinds of foci would most students find interesting and compelling?

4. What can art teach or do better than any other subject area in the elementary school curriculum? How do we know we are teaching or doing this, and in defensible ways?
5. How do we know if and when students are making "connections," and if so, what kinds of connections they actually make? What connections do we want students to make in art, and why? How would we know a connection when we saw one? What kinds of connections are most worthwhile in the long run?

6. How can we create meaningful art discourse in art class that neither diminishes nor underestimates what youngsters are capable of thinking about and discussing in art? Why is artistic discourse apparently a very difficult thing for many art teachers to lead or facilitate in art classes?

7. How can we help students reflect upon and evaluate their own thinking and learning in art in sustained, varied ways? How can we connect students' self-evaluations to the "big ideas" and to the evaluation of our curricular decisions and pedagogy?

8. When integrating across the curriculum, how can art make the knowledge presented in art and elsewhere more problematic? How can the learning of both teachers and students become more reflexive and critical? How can art provoke and promote understanding of the more creative, critical, and controversial dimensions of knowledge and life, often missing in school subjects?

9. Why are we apparently afraid of evaluating students' learning in art with alternative forms of assessment or through our sustained attention and the collection of various forms of evidence for our analysis, evaluation, and reflection?

10. Why isn't the matter of sequencing through the grades and potential repetition or redundancy addressed more seriously by art educators and art specialists? There is precious little time for art in schools, and we ought to make the best of the little time available. I mean sequencing or redundancy not only in terms of content ("big ideas" or merely encountering the elements of design again and again or things like warm/cool colors, landscapes/seascapes) but also in terms of art exemplars selected for visual analysis or examples, media, art activities, and likely art products made by students. One example of unnecessary repetition emerged in just the few studies conducted for this Center and in a few case studies I conducted prior to this five-year line of inquiry: students being asked to make contour drawings of their shoes!
References


APPENDIX

Instructions and Framing Questions Addressed by Art Experts
CURRICULUM IMPROVEMENT STUDY

Mission of the Elementary Subjects Center

The Elementary Subjects Center is one of the mission-oriented research and development centers established by the federal Office of Educational Research and Improvement. Our mission is to develop knowledge and effective teaching in five content areas (social studies, science, mathematics, literature, and the arts) at the elementary grade level, especially as it relates to the conceptual understanding and higher order thinking aspects of learning in those content areas. We seek to identify effective strategies for content area teaching that will empower students with knowledge, skills, and dispositions that they can access and use when relevant—both now and in the future, both in and out of school.

The decision to focus on this mission was prompted by several commonly made criticisms of current practice. One is that although our elementary schools seem to be doing a good job of teaching basic knowledge and skills, as indexed by scores on short answer or multiple choice tests, more emphasis may be placed on rote memorization than on meaningful understanding. A second criticism is that insufficient attention is being given to critical thinking, problem solving, and other higher order thinking aspects of content learning. Related to pressures for introduction of new content have enhanced breadth at the expense of depth. The result is that many topics are merely mentioned rather than taught in sufficient depth to develop conceptual understanding. This creates fragmentation. Instead of integrated networks of content structured around key concepts and generalizations, curricula have become clusters of disconnected content that are not organized coherently. Too many students learn only a smattering of relatively unconnected facts and ideas, most of which are soon forgotten. As a result, they end up able to access their learning in usable form only when presented with well-defined problem situations that cue them to do so (e.g., school assignments and tests).

These concerns reflect our views about learning: We believe that knowledge that is not well connected to other knowledge and past experience is transient and thus of limited value. It is generally not available for use in potentially relevant situations outside of the specific contexts in which it is acquired. Knowledge that is richly connected to other knowledge, on the other hand, is much more accessible. Because it is part of a network or structure, this type of knowledge also provides more entry points for subsequent learning, thus influencing acquisition of new knowledge. The ability to develop relations between new and prior knowledge is facilitated when knowledge already rich in relations is part of the learner's cognitive structure. The importance of connected knowledge has been emphasized by a number of researchers; in fact, some equate connectedness with conceptual understanding.
Purpose of This Study

Our Center's research and development agenda calls for identifying ways to improve current practice, particularly with respect to the criticisms and concerns described above. In a series of related studies, we plan to develop information about expert opinions on ideal practice, describe the variation in current practice (with emphasis on description of what occurs in classrooms where students are empowered with accessible and usable learning), formulate and test the feasibility of guidelines for improvement, and test the effectiveness of those guidelines.

During the first phase of this research agenda, we will acquire and synthesize expert opinion about ideal practice in each of the content areas. The Curriculum Improvement Study is part of this effort. In this study we will be gathering information from two types of experts: (a) university professors recognized for their leadership in elementary level art education (and in particular, in methods of designing such education so as to empower students with accessible and usable learning) and (b) elementary grade teachers recognized for the excellence of their art teaching (and in particular, their efforts to ensure that their students are empowered with accessible and usable learning).

Your participation in this study will occur in two parts, each with several subparts. In the first part of the study, which is discussed in this paper, you will outline your ideas about the key features of ideal elementary level art curricula and illustrate these with examples. By analyzing your responses and those of the other experts included in this study, we expect to identify areas of consensus that represent the best current thinking about the ideal features of elementary art teaching.

Thoughts About Ideal Curriculum

We are interested in having you identify what you consider to be the key features of an ideal elementary grades art curriculum. Before getting to specifics, we need to clarify two aspects of our use of the term curriculum, and our intentions in designing this study. It is essential that you understand these two points.

First, although we call this the Curriculum Improvement Study and frequently use the term "curriculum" for convenience in these instructions, we give the term broad meaning. When we ask you to identify ideal features of a curriculum or to critique a curriculum, we mean to include not only the content (knowledge, skills or strategies, values, and dispositions) addressed in the curriculum's scope and sequence, but also everything else in the art program that impacts on students. Specifically, we mean to include the program's overall goals, the content selected for inclusion, the texts and other curriculum materials, the instructional methods, and the methods of evaluating student learning. In conveying your ideas about the features of ideal curricula, we want you to consider all of these features and the ways that they interrelate to produce effects on the students. You may find it helpful to mentally substitute a term such as "program," "overall approach," or "curriculum-instruction-evaluation combination" for our term "curriculum" as you read through the directions and think about your responses.
Our second clarification concerns the content aspects of ideal curricula. Please bear in mind the breadth versus depth issue and our stress on the importance of (a) empowering students with accessible networks of coherently organized and usable learning and (b) allowing for sufficient development of critical thinking, problem solving, and other higher order applications of this learning. If these goals are to be accomplished, choices must be made; that is, breadth of coverage must be limited to allow for sufficient depth. One cannot address all worthy goals or include all potentially relevant content, instructional methods, activities, assignments, or evaluation methods.

Ideal Curricula

Features of Ideal Curricula

In conveying your ideas about key features of ideal curricula, please begin by reacting to those that we have already described. We have suggested that ideal curricula will be designed to empower students with meaningfully-understood, integrated, and applicable learning that can be accessed and used when relevant in a broad range of situations in and out of school. This implies the following:

(a) balancing breadth with depth by addressing limited content but developing it sufficiently to ensure conceptual understanding;

(b) organizing the content around a limited number of powerful ideas (basic understandings and principles rooed in the disciplines);

(c) emphasizing the relationships between powerful ideas, both by contrasting along common dimensions and integrating across dimensions, so as to produce knowledge structures that are differentiated yet cohesive;

(d) providing students not only with instruction but also with opportunities to actively process information and construct meaning;

(e) fostering problem solving and other higher order thinking skills in the context of knowledge application; thus, the focus is less on thinking processes per se, and more on how to make use of previously acquired knowledge in new contexts.
Questions for You to Address Relating to Ideal Curriculum

Given the above discussion, we would like you to begin by considering two questions:

1. You may or may not agree with our suggestions about key features of ideal curricula. If you agree with everything we have said, just say so and proceed to Question 2. However, if there is anything about these ideas that you would not fully endorse, please tell us. Do you simply disagree with any of them? Do you partly agree but think that they need to be qualified or rephrased? Are there any that you see as desirable but not important enough to be considered key features? Please address these or any other points of disagreement that you may have with our suggestions about the key features of ideal curricula.

2. Beyond what has already been said in your response to the previous question, and keeping in mind our broad definition of "curricula," what other features would you identify as key features of ideal curricula? List as many such features as you believe are important enough to be considered key features, and elaborate as much as you can.

Curriculum Design Exercises

Now that you have given your ideas about the key features of ideal curricula at the K-6 level, we would like you to apply them in responding to three curriculum design exercises. For the exercises, we will present you with three important goals that are representative of what an elementary art curriculum might address, and for each goal we will ask you to respond to four questions.

Goals to Be Addressed

You may find it helpful to approach these exercises as if you were a consultant assisting the staff of a local school. The school has decided to have you address three general goals that are representative of what they are trying to accomplish in their elementary level art program. The three goals that you have been asked to address are as follows:

(a) developing an understanding of how visual elements and symbols (line, shape, color, texture) are selected, organized, and presented by artists to communicate meaning

(b) developing an understanding of the artistic process (choices, decision making, critical/creative thinking) in creating artistic forms with expressive intent (not merely to produce art forms)

(c) developing a disposition to actively "attend to" and enjoy art for its own sake (appreciate the diversity of art forms and how artists interpret human experience and the world around them; appreciate art as a form of human inquiry, expression, interpretation of the world)
Assume that the school serves a student population that is racially and culturally diverse but neither notably high nor notably low in socioeconomic status, that the students are grouped heterogeneously, that class sizes average about 25, and that the teachers work with adequate but not abundant resources. Also assume that the teachers are fairly well grounded in all the subjects they teach, including art. With these constraints, you could suggest whatever strategies you wish for accomplishing the three goals, but your recommendations should be realistic (e.g., cognizant of the teacher's need to handle the full range of subject matter areas and to address other major goals even within the art program).

**Questions for You to Address for Each Goal**

For each of the three goals, please answer each of the following questions:

1. What important understandings or generalizations should be developed in students if the goal is to be accomplished? You may include as many of these as you wish and describe them in as much detail as you wish, although given the focus on the most basic and powerful understandings and generalizations, we expect that you will be able to respond with brief listings of perhaps as many as ten such key understandings or generalizations once you have thought through and organized your ideas. (An example might be helpful: If the overall goal is developing an appreciation and valuing of the role that art plays in one's own life and in other people's lives, a key understanding could be that one's adaptability to different types of arts is limited by culture.)

2. What sorts of relationships exist among the key understandings and generalizations you have listed? Do they all fit together into a single network? Are two or more of them linked through cause/effect, rule/example, whole/part, or other logical relationships? Do some of them form natural sequences along some common dimension? Feel free to supplement your comments about such relationships with diagrams or other illustrations if you wish to do so.

3. How would you organize these key understandings and generalizations to present them to students? Explain your rationale for this organizational plan (i.e., would it be determined by the logical relationships outlined in your answer to the previous question, or instead by other criteria such as the degree to which the key ideas refer to things that are already familiar to children at particular ages or the degree to which they can be represented in concrete terms). In general, please describe the approach that you would take in ordering or organizing these ideas in the curriculum, and explain your rationale.

4. Select one of the key understandings or generalizations you have listed and explain in detail how you would propose to develop it at the second or the fifth grade levels. (You may wish to start with the grade you are more knowledgeable about and use it as a basis for comparison with the other grade. We can help you decide which ideas on your list would be the best ones to use as the basis for this part of the exercise: we are looking for ideas that seem to be at about the right level of generality and to be appropriate for development at both the second grade and the fifth grade level.)
For each of these two grade levels, tell us in detail how you would teach the key understanding or generalization. Because it is likely that it will take more than one lesson to teach the understanding, please sketch out your overall instructional plan first, then select one prototypic lesson for more detailed treatment. For this lesson, please address the following: (a) What kind of information would you provide through teacher presentation, or through having the students read, or through some other mechanism? (b) What sorts of teacher-student or student-student discourse would occur, and with what purposes in mind? (c) What activities or assignments would be included, and with what purposes? and (d) How would you evaluate student understanding or application of the key idea?

Summary of What We Would Like to Have You Do

1. State whether or not you agree with our suggestions about the key features of ideal curricula, and elaborate on any disagreements.

2. Identify any additional features of ideal curricula.

3. Respond to the following, for each of the three goals listed previously.
   a. Identify the central understandings and generalizations that should be developed.
   b. Identify the relationships among these central understandings and generalizations.
   c. Organize these key understandings and generalizations as you would to present them to students.
   d. Explain this organization.
   e. Describe how one of these central understandings or generalizations would be taught at the second and at the fifth-grade levels.