VISUAL ARTS EDUCATION

Karen Lee Carroll, EdD
Maryland Institute College of Art

James L. Tucker, Jr.
Series Editor

MARYLAND STATE
DEPARTMENT
OF EDUCATION

BUILDING EFFECTIVE TEACHING
THROUGH EDUCATIONAL RESEARCH
Maryland State Board of Education

Edward L. Root, President
Dunbar Brooks, Vice President
Nancy S. Grasmick, Secretary/Treasurer

Lelia T. Allen
J. Henry Butta
Beverly A. Cooper
Calvin D. Disney
Charlene M. Dukes
Richard L. Goodall
Karabelle Pizzigati
Maria C. Torres-Queral
David F. Tufo
Brian W. Frazee, Student Member

Maryland State Department of Education

Nancy S. Grasmick, State Superintendent of Schools
Ronald A. Peiffer, Deputy State Superintendent
Office of Academic Policy
A. Skipp Sanders, Deputy State Superintendent
Office of Administration
JoAnne L. Carter, Deputy State Superintendent
Office of Instruction and Academic Acceleration
Colleen Seremet, Assistant State Superintendent
Division of Instruction
Dixie Stack, Director of Curriculum
Division of Instruction
James L. Tucker, Jr., Coordinator of Fine Arts
Division of Instruction

State of Maryland

Martin O’Malley, Governor

The Maryland State Department of Education does not discriminate on the basis of race, color, sex, age, national origin, religion, disability, or sexual orientation in matters affecting employment or in providing access to programs. For inquiries related to departmental policies, contact the Equity Assurance and Compliance Office.
FOREWORD

The State of Maryland is gaining increased recognition nationally for its education reform initiatives and its commitment to high standards of accountability in education. It further recognizes the need for high quality arts education as an essential part of our children’s education. In 1989, after a decade of requiring experiences in dance, music, theatre, and the visual arts for all students in grades K-8, Maryland became one of the first states to require that students earn a credit in the fine arts to receive the Maryland High School Diploma. Maryland’s reform initiatives have traditionally focused on envisioning what students should know and be able to do, providing resources and enhancing instructional practice, and documenting student learning. This particular project focuses on informing instructional practice.

In 1995, the Maryland State Board of Education adopted a goal that 100 percent of Maryland’s students will participate in fine arts programs that enable them to meet the content and achievement standards established by State standards for the arts. By 1997, K-12 standards for dance, music, theatre, and visual arts education, developed by a 38 member task force, were approved by the State Board. The following year Project BETTER was initiated to develop a resource tool that would inform instructional practice in each of the art forms.

The concept for Project BETTER – Building Effective Teaching Through Educational Research – was created by the Division of Instruction of the Maryland State Department of Education (MSDE) during the late 1980s as part of its mission to promote effective instruction. The development of the four volume publication for the current project was guided by the same three major objectives: 1) to identify current research on effective instruction, 2) to synthesize this research in the form of non-theoretical summaries, and 3) to deliver this information directly to practitioners.

The information in this publication is designed as a resource to assist teachers in expanding and refining their repertoire of teaching strategies and to guide instructional planning and decision-making that supports student achievement of State standards in the arts. It is not intended to prescribe a particular style of teaching or one “best” method. This resource provides a guide to teachers as they consider their curriculum objectives, the nature and needs of their students, their personal style of teaching, and their available instructional resources. The application of this knowledge will result in more effective teaching and more powerful learning.
**Introduction**

*BETTER Visual Arts Education* was initially written by Marilyn Price for the Maryland State Department of Education and published in 1991. This revised version was commissioned a decade later with the goal of supporting the Maryland Essential Learner Outcomes in Art. It is restructured to feature entries that have particular relevance to these outcomes. All entries have been revised, consolidated and/or edited, or replaced to reflect contemporary developments in the practice and literature of art education.

Structural changes in the revised edition of *Better Visual Arts Education* reflect this author’s interest in **embracing practice while qualifying what counts as research**. Practice, as it is developed in the classroom by real teachers with real learners, provides a picture into the possibilities of teaching often accompanied by descriptive information and examples of student work. These accounts are reported through a number of avenues including magazines designed for teacher-to-teacher exchanges of ideas, presentations at state and national conferences, pre- and in-service training, and within the context of study groups of teachers. Beyond their initial value of illustrating “what works in practice,” these reports may also inform theory. Possibilities for better practice are also provided in many texts. Here models are provided, usually accompanied by examples.

All sources are included in the citations, divided into different kinds of sources and accompanied by an annotation. The annotations offer expanded information and so should be read as part of the whole text. **References** are identified that provide conceptual or theoretical background. **Research** highlights selected studies published in the field’s juried journals and/or reported at conferences. **Reports from Practice** provide a sampling of articles found in journals and magazines as well as teacher presentations. **Models for Practice** list selected resources found in texts and articles.

In organizing this report to support the Maryland Essential Learner Outcomes (ELOs), an effort was made to show how making art and critical response feed each other. Consistent with the ELOs, where the structure of outcomes cycles from one modality of inquiry to
another, sets of entries are organized here to reflect the rich connections between the two. While Outcomes I and III are focused primarily on making art, Outcomes II and IV have critical response as their focus. Yet each of the outcome sections cycles back to the other mode of inquiry. Metaphorically, one might picture this interrelationship as similar to the spiraling and interlocking structure of DNA. Each outcome section also has its own developmental structure, moving increasingly toward higher levels of inquiry, application, synthesis, and reflection. These somewhat sequential structures are intended to help teachers identify a logical path for instruction, moving up from basic and initial encounters as more sophisticated skills and complex concepts are mastered.

Certain entries that have general or broad applicability are presented first in the section called Better General Practice in Visual Arts Education. Additional entries relevant to each of the four different, yet interrelated, sets of outcomes are presented in separate sections:

I  Developing a Repertoire of Skills for Visual Perception and Artistic Response
II  Facilitating Investigations into Historical, Cultural, and Social Context
III  Facilitating Engagement with the Art-Making Process
IV  Facilitating Critical and Aesthetic Inquiry.

The goal of this publication is to identify a selection of better practices in visual arts education that may prove useful to art teachers in their efforts to shape teaching in response to the state’s desired outcomes. The selected practices are referenced to current literature in art education and related fields. Sources analyzed in the process of constructing this document include dissertation studies in art education since 1991, research articles reported in Studies in Art Education, the Journal of Aesthetic Education, and Visual Arts Research. Additional articles are also referenced including those identified through ERIC searches, cited in other studies, and published in Art Education and School Arts Magazine. Where appropriate, presentations from national and state conferences as well as pre-service and professional development, research studies conducted at the master’s level, and the findings of study groups have also been included. A special effort has been made to include contributions by Maryland art educators.

Some observations about the state of research in art education can be made as a result of this investigation. First of all, large-scale research is almost nonexistent, and where it exists, it is focused on how art affects learning in other content areas. Research directly related to practice is also a rare exception at the doctoral level. Here, the bulk of the research focuses on history, theory, philosophy, developmental issues, and other questions that have arisen out of practice. While such research may have implications for practice,
it is the exception to report findings that critically evaluate the outcomes of practice. When a practice is reported, it is more likely to have been tested at the college level with elementary education majors or pre-service art education students than in the context of K-12 schooling.

Investigations focused on practice are much more common at the master’s level. In general, research at either the master’s or doctoral level involves small-scale investigations. Case studies are usually limited to a handful of subjects, sometimes as few as one. Where groups of students are involved in a pilot treatment, studies tend to focus on one or two classes with fewer than a total of 40 participants. While some case studies are more longitudinal, most interventions are typically treatments lasting only a few weeks or so. A control group is rarely included. As well, the researcher is often an observer-participant in the study. Additionally, researchers may be reporting on their own practice. Altogether, these studies are typically idiosyncratic, isolated, unduplicated in another setting, infrequently reported in juried publications, and scattered across a broad landscape of issues. Thus it is difficult to stake claims based on such research.

In preparing this document, there is no claim that this search has been exhaustive. In truth, it could have gone on forever as new—and sometimes old—material (re)surfaced. Instead, predictable sources primarily within the field of art education have been reviewed. As such, this document represents a form of meta-research with the goal of unearthing a pattern of findings from a variety of sources and levels of the profession that appear to suggest how better practice in visual arts education might look. In other words, a practice was viewed as gaining credibility the more it was modeled, reported, and situated within a context. Using editorial prerogative, some practices have also been added because they are taken to be particularly worthwhile, even if research and reporting have not as yet validated them in concrete reports.

It is hoped that this document will be useful to teachers who, in planning and preparing to teach, would like an update on theory and practice with ideas of where to look for further information. Scanning the table of contents can help them find relevant entries. Rather than a book for cover-to-cover reading, it can function as a resource to be used as need arises. It should, however, make it clear that there is a wealth of information that can be tapped and that there are others working to understand and better shape practice.

As a “picture” of better practice, teachers interested in reporting their own practices or conducting research may be able to get a sense of what’s missing, misinterpreted, under-reported, and/or waiting to be researched. Those who see gaps (of which there are many)
or find differences with what is reported here are encouraged to take on the challenge of sharing those insights through one or more of the avenues available in the field.

Those engaged in conducting research at any level of the field will notice that different people focus on different aspects of theory and practice. One can begin to get a broad picture of the field, the connections among voices speaking to certain issues, and the efforts of those puzzling through the problems of translating theory into practice. Teachers may also recognize how their own visceral practice fits within a larger context of theory and philosophy. They are especially encouraged to think about how practice might inform theory.

Certainly, practice, theory, and philosophy in visual arts education will continue to evolve. It is hoped that a third revision in another decade will reflect a concerted effort to build a stronger base for practice. Meanwhile, the contributions of many fine art educators are reflected in the contents of this report. The literature is rich with ideas, a passion for the teaching of art, and an ambitious agenda for art education. I acknowledge the special privilege I have had in working with inspired art teachers for the past 30 years, many of whom teach in the state of Maryland. In preparing this document, I am indebted to them all. I hope that this report will help us see the whole of practice in a new light.

Karen Lee Carroll, EdD
Maryland Institute College of Art
2003
ACKNOWLEDGEMENTS

I would like to thank Jay Tucker and the Maryland State Department of Education for inviting me to write this piece. With the generous support of a sabbatical from the Maryland Institute College of Art, I was able to get this project started. Near the completion, it benefited from the excellent editing of Cynthia I. Leitner.

This task set me on a mission to examine more carefully the work being done in the field of art education. I have been impressed with the range of our interests, our passion for the profession, and the quality of our writing. I have enjoyed getting to know many new writers as well as taking a closer look at those I have encountered before. I have held in my mind’s eye the many wonderful teachers with whom I have had the good fortune to know. Hopefully, many will recognize their voices in this document and feel I have given them appropriate recognition. I hope as well to have represented the ideas of others in an accurate manner and apologize to those I have not included. This is a project that could have gone on forever, and in fact, reached a point where I just had to stop. I hope it will be adapted to an interactive media so that additions can be made as practice and research continues to unfold. I give special thanks to my good colleagues and students who have encouraged and inspired me in this effort. It is dedicated to all those struggling to make the teaching of art an art form in itself.

Karen Lee Carroll
Baltimore, 2003
Table of Contents

Forword iii

Introduction iv

Better General Practice for Visual Arts Education

Attending to the Learner 2
Integrating Creative Expression with Critical Response 10
Designing Reflective and Holistic Instruction 14
Approaching Art from a Transcultural Perspective 18
Planning Instruction with Assessment and Reflection in Mind 24
Using Language to Support Inquiry-Based Learning 30
Developing Language Acquisition and Conceptual Development through Art 34
Enriching Art Content through Reading 38
Creating a Mutually Supportive Relationship between Art and Writing 42
Identifying Highly Able Students in the Visual Arts 48
Shaping Learning Experiences for Highly Able Students 52
Creating Supportive Conditions for Students with Special Needs 58
Shaping Learning Experiences for Students with Special Needs 62

Outcome I: Developing a Repertoire of Skills for Visual Perception and Artistic Response

Drawing on Imagination, Memory, and Experience 68
Tapping the Narrative Impulse 70
Working from Observation 74
Developing an Expanded Vocabulary for Visual Form 78
Expanding the Repertoire for Visual Perception and Artistic Response 82
Reflecting on Perceiving and Responding Visually 88
Outcome II: Facilitating Investigations into Historical, Cultural, and Social Context

Constructing Art Historical Context  92
Studying Objects and Material Culture  96
Examining Visual Culture  100
Making Interdisciplinary Connections  104
Creating Art in Response to Contemporary Issues and Concerns  110

Outcome III: Facilitating Engagement with the Art-Making Process

Investigating Materials and Ideas  116
Structuring for Creative Thinking  120
Forming Elegant Problems  126
Designing Problems Based on the Real World of Work  130
Facilitating Dialogue and Discourse about Student Work  134

Outcome IV: Facilitating Critical and Aesthetic Inquiry

Engaging Students with Art Objects  140
Orchestrating Conversations about Art  144
Employing Storytelling and Puzzle Problems  150
Using Interpretive Strategies to Find Meaning  152
Promoting Critical Thinking through Problem-Based Inquiry  156
Facilitating Student-Curated Exhibitions  160
Using Models for Writing about Art  164
Making Art Inspired by the Study of Art  166
Better General Practice in Visual Arts Education

Attending to the Learner
Integrating Creative Expression with Critical Response
Designing Reflective and Holistic Instruction
Approaching Art from a Transcultural Perspective
Planning Instruction with Assessment and Reflection in Mind
Using Language to Support Inquiry-Based Learning
Developing Language Acquisition and Conceptual Development through Art
Enriching Art Content through Reading
Creating a Mutually Supportive Relationship between Art and Writing
Identifying Highly Able Students in the Visual Arts
Shaping Learning Experiences for Highly Able Students
Creating Supportive Conditions for Students with Special Needs
Shaping Learning Experiences for Students with Special Needs
Attending to the Learner

**THEORY**

Human growth and development represent a complex and multidimensional proposition. Human nature manifests itself in certain propensities and facilities, some of which are universal and others particular. The realization of each human’s potential is affected by behaviors, attitudes, beliefs, and values experienced over time in relationships with family, community, culture, and most certainly education (Newton & Kantner, 1997). Apparent dimensions may have an impact on artistic development, including biological unfolding, cultural influences, development of mastery, and personal predisposition (Wilson & Wilson, 1979; McGregor, 1997). Others claim that perceptual and cognitive growth have much to do with the course of development (Arnheim, 1997; Parsons, 1987; Reith, 1997). Brain research suggests that the emotions play a significant role in development (Sylwester, 1995; Goleman, 1995; Rettig & Rettig, 1999). Different metaphors have been used as well. Some liken development to a map (Kindler & Darras, 1997), while others see it as a river traveling in a direction over time (McGregor, 1997).

In attending to learners, certain theories shed light on what might be developmentally appropriate and personally relevant at different points. In its broadest sense, developmental theory concerns patterns in growth commonly experienced by human beings. In contrast, differential theory acknowledges general and specific characteristics that distinguish growth patterns of certain groups and individuals. Contemporary developmental theory accommodates notions of diverse paths to maturation and multiple endpoints (Wolf & Perry, 1988; Kindler, 1997). While developmental theory helps identify the promises of human potential (Wolf, 1988), research makes it clear that instruction has an important role to play in its realization (Parsons, 1987; Graham, 2001). Likewise, instruction is colored by artistic preferences, aesthetic theories, and notions about art and development held by those who teach art (Wilson, 1997).

**BETTER PRACTICE**

Teachers who attend to the developmental, contextual, and curricular needs of students, as well as their readiness for new learning, can make informed and productive instructional choices.
Patterns have been identified for several dimensions of human growth including cognitive (Piaget), psychological (Erickson), and moral (Kohlberg) development. Developmental theory “maintains that children reach maturity through predictable and sequential stages of growth and development” (Baker, 1984, p. 116). Further, learning at one stage is seen as critical in laying the foundation for the next stage. Developmental theory is loosely related to age yet maturation becomes increasingly dependent on other factors as years accrue, including cognitive development, culture, and education. Developmental theory provides a guide for recognizing and anticipating typical and atypical patterns in behaviors and achievements within a developmental framework.

The normal course of development related to graphic representation is well documented and researched (Lowenfeld, 1957; Kellogg, 1969; Goodnow, 1977; Gardner, 1980; Golomb, 1992). However, it should be noted that assumptions about the course of graphic development are primarily based on drawing done from memory and imagination. How the course of development is affected by other drawing strategies, such as working from observation, is less well reported in the literature. While somewhat tied to age (Willats, 1977), graphic development also appears to depend on opportunity, pedagogy, models, and practice (Gardner, 1980; Smith, 1999; Graham, 2001). The course of development related to spatial representation is less well documented but suggests some parallels to graphic development (Golomb, 1974, 1997). Developmental sequences have been identified for aesthetic responses that seem related to cognitive development yet dependent on knowledge base, strategies employed, and/or learner’s disposition (Koroscik, 1997; Parsons et al., 1978; Parsons, 1987; Wolf, 1988).

Learning preferences or styles may play a significant role in learning. Exceptions to the normal course of development or instances of uneven development can occur with those who experience various kinds of challenges or disabilities. Exceptions are also evident among those who are developmentally advanced and highly able in one or more areas. For more information on these two exceptionalities, see entries related to students with special needs and the highly able.

The “zone of proximal development” refers to the difference between what students can do on their own and what they can do with the benefit of instruction (Vygotsky, 1986). Thus, gathering evidence that reveals current levels of student performance and mastery and comparing it to possible levels of performance predicted developmentally can provide information needed to identify the proximal zone of development for individual students and/or whole classes. With that zone in mind, developmentally appropriate practice can be designed. Where tasks that are too easy lead to boredom, those that are too hard will result in frustration. Tasks that are relevant and meaningful, as well as sufficiently challenging to engage the learner, are likely to have the greatest value.

Developmental sequences and patterns found in creative expression and critical response include the following findings:

The Development of Graphic Representation

Early representational efforts can be thought of as involving at least four different types of problem solving. They include the development of (1) a repertoire of marks, lines, and shapes; (2) a structure for a schema or an equivalent for a variety of subject matter; (3) the depiction of detail; and (4) the organization of the picture plane (Carroll, 2001).

Early representational efforts are intimately connected with the development of story and verbal language. Narrative intent remains a strong motivation, throughout the grades, for drawing and image making (Gardner, 1980; Olson, 1992).

All children appear to begin to draw in a similar fashion. Drawing development appears to be pulled forward by the possibilities of representation (Golomb, 1992).

It also appears that the development of graphic representation, except perhaps in the case of those who have exceptional interest and ability, does not necessarily evolve on its own (Golomb, 1992).

Learning to draw involves learning to master the conventions of a visual language (Golomb, 1992).

The development of drawing and representational skills appears to be cyclical in nature, moving to and from levels of mastery. As the need arises to express more sophisticated ideas and images, the quality of representation may regress or decline until more advanced conventions are mastered (Baker, 1986; Wilson, 1997).

Simultaneous development of different drawing strategies, including working from memory and imagination, from observation, and from works of art and popular sources, is evident in the early works of major artists (Duncan, 1984; Pariser, 1985; Carroll, 1994).

Observational drawing can begin as early as kindergarten and can be cultivated throughout the grades (Colbert & Taunton, 1988; Smith et al., 1997).
The adolescent crisis refers to that point in drawing development where the need to achieve a reasonable likeness becomes a critical passage in artistic empowerment. It signals a readiness for the techniques of representational drawing. If the need goes unaddressed, interest and enthusiasm for drawing usually come to a standstill. However, if it is met with appropriate instructional interventions, it can mark the transition to more sophisticated, powerful, and creative modes of visual thought and expression (Lowenfeld, 1957; Edwards, 1989; Graham, 2001).

**The Development of Three-Dimensional and Spatial-Kinesthetic Representation**

Three-dimensional representation involves problem solving similar to that of two-dimensional representation. It requires learning conventions of a visual and spatial language as well as mastery of three-dimensional media. For example, it involves developing a repertoire of shapes and textures, creating structures and forms with a medium, finding ways to depict details, and organizing a three-dimensional space (Golomb, 1974; Gardner, 1980; Carroll & Rastegar, in progress).

Children become representational in clay about the age of 5 and exhibit some understanding of the third dimension in attending to volume, upright stances, and multiple sides. “Children seem to approach modeling with an incipiently three-dimensional conception that becomes gradually refined and differentiated, provided the child is exposed to this medium and experiments with various tasks and possibilities” (Golomb, 1997, p. 139).

Some forms of representation are efforts to deal with action, interaction, and events played out in time. Different media and strategies are needed, such as diagrams, maps, visual records of movement, and documentation of gestures (Kindler, 1999).

**The Development of Critical and Aesthetic Response**

The ability to observe and inquire about images proceeds in a developmental fashion. From ages 4 to 7, children develop strong picture-reading skills and can form interpretations based on an event and knowledge of a scene. As well, they can pursue a long chain of questions about visual phenomena that puzzle them and make decisions about what they like. Inquiries are frequently limited to images as they are rather than how they might be (Wolf, 1988; Yenawine, n.d.).

From ages 8 to 12, students are capable of understanding visual systems. As observers, they can understand concepts of rendition and version (style, genre) and develop a pictorial attitude for looking at how a picture is made, not simply what it represents (Wolf, 1988).
From 13 to 18, students are capable of understanding artistic choices and can think more abstractly, reason about ideas and principles, and identify how particular forms, materials, and techniques suggest meaning. They are able to make the distinction between technical and expressive skills and can use artistic intention and message as criteria for judging artworks. Students can begin to distinguish between what they like and what is good art (Wolf, 1988; Yenawine, n.d.).

While even young children can be taught behaviors for recognizing and categorizing artworks by such cues as style, cognitive understanding of art appears to be tied to cognitive development. Parsons (1987) identifies five stages somewhat parallel to Kohlberg’s six stages of moral development. In each of the five stages, one central aspect reflects significant change. The five stages reflect, developmentally, how works of art are understood as aesthetic objects. “Aesthetic development consists precisely in the gradual acquisition of…insights” (p. 27). At each stage, certain criteria dominate. Stage 1: favoritism; Stage 2: beauty and realism; Stage 3: expressiveness; Stage 4: style and form; and Stage 5: autonomy. According to Parsons, reaching maturation requires an education in which works of art are encountered often and thought about seriously.

**Recommendations**

Get to know who your students are, their abilities and interests, concerns and issues, hopes and dreams. Use conversations, surveys, pre-tests or works of record, ongoing assessment and reflection, and open dialogue to develop an understanding of how art experiences can serve their needs. Invite students to bring to class spontaneous art done at home, collections they have assembled, artifacts that interest them, and information about their activities outside of school. Pay attention to the larger culture that learners experience on a daily basis. Allow students to have a voice in shaping the art agenda for the year. Encourage students to identify their own goals.

Get to know the community in which your students live and attend school. Involve students in helping you discover their heritage, cultural traditions, and values. Research community resources including after-school programs, artists, and arts organizations. Inquire about special school or community-based issues or projects.

Get to know the larger curriculum of the school. Invite colleagues into a dialogue about the role art can play in helping to expand, extend, and enhance learning across disciplinary boarders. Look for conceptual connections, themes, and other ways to connect with the broader learning agenda of the school. Provide others with information about the art program and its objectives.

Think developmentally about materials, processes, and art content in planning a comprehensive curriculum. Develop a repertoire of representational and thinking skills that will support more advanced experiences later on. Develop a dialogue with feeder schools about expectations, issues, and concerns. Consider thinking developmentally about the elementary, middle, and high school levels as opportunities for familiarization, expansion, and application (McGregor, 1997). Initiate opportunities for older students to work with younger ones.

Maintain a dialogue with peers, sharing observations about student performance. Be an advocate for those students who appear to be visual, spatial, and/or kinesthetic learners.

Envision yourself as a mediator between the world of the learner and the world of art in search of ways to bring those two worlds together in a meaningful way.

Acknowledge the responsibility involved in determining what art is encountered, how it is experienced, and what options for art making are available. Be conscious of your own artistic preferences and aesthetic theories that inform and shape your instructional choices and how the work of students is assessed (Wilson, 1997).

Monitor your own teaching: Why should students be interested in doing what I have proposed? Where did these ideas come from? What about this makes this a valuable use of instructional time? Are the tasks developmentally appropriate? Are they meaningful and engaging? Am I providing enough instruction and guidance? Are there opportunities here for deep learning? Is there room for personal expression?
BETTER VISUAL ARTS EDUCATION

REFERENCES


Baker, D. W. (1986). Lectures at Teachers College, Columbia University. Baker argues that development moves to and from levels of mastery. When ideas outpace drawing conventions, a period of exploration sets in. Drawing instruction can facilitate higher levels of mastery, offsetting what some regard as the decline of drawing development.

Burton, J. (2001). Lowenfeld: An(other) look. Art Education, 54(6), 33-42. Burton builds upon Lowenfeld’s work to offer a theory of artistic development. She argues that “it is through finding their own visual voices that youngsters can acquire the kind of knowledge they will need to interpret the intentions of others, to speak, challenge, critique, and give form and existence to new possibilities of being in the world” (p. 42).

Gardner, H. (1980). Artful scribbles. New York: Basic Books. As a developmental psychologist, Gardner explores the development of drawing from first scribbles through adolescence, examining the drawing behaviors and products of his own children and others as well as the reports from other sources. He raises questions regarding factors that shape the course of graphic representation.

Goleman, D. (1995). Emotional intelligence. New York: Bantam Books. Book covers the emotional brain, the nature of emotional intelligence, how it is applied, windows of opportunity for its development, and emotional literacy. Makes the case that the arts have a great deal to offer to the development of emotional intelligence.


Kindler, A. M. (Ed.) (1997). Child development in art. Reston, VA: National Art Education Association. An anthology of current writing on child development. Collection includes essays by Arneheim, Kindler and Darras, Davis, Reith, Wilson, Freedman, Duncum, Pariser, Golomb, Koroscik, Newton and Kantner, and McGregor. As an update on contemporary thinking about development, this anthology suggests that it continues to be a fascinating topic and more complex than it was taken to be 50 or 100 years ago.


Lowenfeld, V. (1957). Creative and mental growth, 3rd ed. New York: Macmillan. The last of Lowenfeld’s solo editions, this text illustrates various stages of drawing development through examples, charts, and discussions. Lowenfeld examines development from a number of points of view, including intellectual, emotional, social, perceptual, physical, and aesthetic.

McGregor, R. N. (1997). Development and practice: What can the literature tell the teacher? In A. M. Kindler (Ed.), Child development in art (pp. 183-192). Reston, VA: National Art Education Association. A number of questions are revisited in this reflective essay, including notions about what students are capable of achieving, what circumstances permit movement in desired directions, and how facilitative learning experiences may be devised.

Rousseau, J. J. (1956). Trans. W. Boyd. The Emile of Jean Jacques Rousseau: Selections. New York: Teachers College Press. First published in 1762, Rousseau’s fictional story of Emile’s and Sophie’s education set forth the premises of developmental theory in 1762. It took a hundred years for Pestalozzi and Froebel to translate his theory into pedagogy and until the 20th century for the field of developmental psychology to fully develop and test the theory in research. Meanwhile, Rousseau envisioned fairly accurately the stages of development and described an education that emphasized learning through the senses and included an emphasis on drawing.


Wolf, D. P. (1988). The growth of three aesthetic stances: What developmental psychology suggests about discipline-based art education. In Seminar Proceedings: Issues in Discipline-Based Art Education (pp. 85-100). Los Angeles: Getty Center for Education in the Arts. This paper outlines three aesthetic stances—maker, observer, and inquirer—from ages 4 to 18. Wolf also observes that developmental studies suggest possibilities and/or necessities for learning more than absolute sequences.

RESEARCH


Duncan, P. (1984). How 35 children, born between 1724 and 1900, learned to draw. Studies in Art Education, 26 (1), 93-102. Study reveals that multiple strategies were used in learning to draw and among them the most common was copying. Others included working from observation, imagination, and memory.


Koroscik, J. S. (1997). What potential do young people have for understanding works of art? In A. M. Kindler (Ed.), Child development in art (pp. 143-164). Reston, VA: National Art Education Association. Article describes a three-part framework for studying children’s understanding of artworks. By focusing on misunderstandings, it is possible to ascertain insights about the learner’s knowledge base, the strategies that were used in interpreting works of art, and the learner’s disposition. Students’ interest in search strategies and transfer is discussed. Koroscik also draws upon novice-expert studies in assessing understanding.

Newton, C., & Kantner, L. (1997). Cross-cultural research in aesthetic development. A review. In A. M. Kindler (Ed.), Child development in art (pp. 185-182). Reston, VA: National Art Education Association. Article offers reviews of several studies of aesthetic development drawn from cross-cultural studies. The relationship to culture is considered from different points of view: interpretation of space in two-dimensional imagery, aesthetic sensitivity, and aesthetic preferences. While these studies offer certain insights, very few have been concerned with developmental changes in aesthetic responses. More study is needed.


Parsons, M. J. (1987). How we understand art: A cognitive developmental account of aesthetic experience. New York: Cambridge University Press. Book begins with a discussion of developmental theory and its relationship to how an understanding of art might progress from dependence to autonomy. Based on 10 years of interviews with subjects of all ages, Parsons reviews the manner in which cognitive understanding appears to develop. Following an overview of the stages, a chapter each is devoted to examining development related to understanding: The Subject, Expression, The Medium, Form and Style, and Judgment.

Reith, E. (1997). Drawing development: The child’s understanding of the dual reality of pictorial representations. In A. M. Kindler (Ed.), Child development in art (pp. 315-334). Reston, VA: National Art Education Association. Reports discovery that multiple strategies were used in learning to draw and among them the most common was copying. Others included working from observation, imagination, and memory.

The “naïve theory” from psychology is applied to the study of pictorial representations. Naïve theory assumes that mental models govern conceptual children’s understanding. Naïve theory appears adequate in explaining developments in children’s drawings as well as their work in other media and in understanding works of art.

Study involved four middle school subjects invited to document visual experiences they considered important. Study suggests that their experiences provide important contextual information, including how they see the world and the meanings they find in their visual experiences.


Children of different ages, 6 and up, were asked to draw a table set with objects. Willats divided the work into six groups, each suggesting yet another step in the process of creating an illusion to the third dimension using the conventions of Western perspective. He concluded that progress was, in part, developmental and, in part, familiarly with graphic models for solving the problems of perspective.

The study of children’s story drawings suggests that four dimensions impact on drawing development: biological unfolding, cultural influences, development of mastery, and personal predisposition.


A discussion illustrated by examples of student work from Japanese students involved in manga, the U.S. Indian School in Carlisle, Pa., and Lowenfeld’s assignments. Suggests that given the almost complete control teachers exercise over instructional choices, they need to be conscious of the artistic preferences and aesthetic theories that color their teaching.

A portrait of drawing development informed by research at Harvard’s Project Zero. Begins with the assumption that drawing development in Western culture is primarily about the acquisition of pictorial realism. In contrast, Project Zero found evidence as early as 12 to 15 months of the appearance and use of distinguishable drawing systems. Suggests the development of drawing skills should be thought of as generating repertoires of visual languages along with ideas about how to apply them to different situations. Three endpoints are discussed: the onset of representational skills, the emergence of distinct genres, and the appearance of renditions.

REPOR TS FROM PRACTICE


In this series entitled “Developing Minds,” Burton provides a developmental model but does not label stages. Rather, her descriptions provide an insight into essential learning about the developing relationship between ideas, concepts, and materials. Descriptions are accompanied by scripts that illustrate a dialogue between the teacher and groups of learners that range from preschool children through young adolescents.


Discusses early schematic drawing and the myths that prevent people from drawing realistically. Includes a developmental sequential course of study in observational drawing that addresses the “representational crisis.”


Implications of brain research for K-5 art education are identified with suggestions for using the emotions, using all the senses, promoting self-direction, enabling social learning, and encouraging pattern finding.


Developmental profiles of students from kindergarten through Grade 6 are offered as part of this report on observational drawing. Includes a dialogic method, examples of subject matter, and samples of student work.


Although out of print, this book contains a chapter on “Learning to draw: nurturing the natural” that explains why children’s drawings look as they do. Another chapter explores the question of why children draw, the different realities they may depict, and suggestions for talking with children about their drawings.


Demonstrates the use of a discovery method wherein novice learners make connections between their lived knowledge and art. Novice learners are more likely to make connections by finding stories related to their own lives whereas more experienced and older students are more willing to move beyond concrete reality to symbolic ideas.
Integrating Creative Expression with Critical Response

THEORY
Integrating creative expression with critical response and a cycling back and forth between the two was envisioned in the development of the Maryland Essential Learner Outcomes. An integrated approach to creative expression and critical response allows each experience to inform the other (Chapman, 1978; Mittler, 1986; Tollifson, 1988). Grounding instruction in artworks from history and contemporary art gives studio problems validity (Irvine, 1984). Further, engaging students in the study of artworks allows them to glean insights that will inform their studio investigations (Cherry & Mellendick, 2002; Mann, 2002; Pistolesi, 2001). In all, a broad exposure to art helps develop a repertoire of ideas about the forms art can take and the manner in which ideas and materials work together for expressive purposes.

DIFFERENT MODELS HAVE BEEN PROVIDED FOR STRUCTURING INTEGRATED APPROACHES TO CURRICULUM. Chapman (1978) illustrated how to address both critical response and creative expression investigating personal development, the role of art in society, and artistic heritage. In a Discipline-Based approach to art education, four areas of study are identified: art history, criticism, aesthetics, and studio production. An art-centered art curriculum might involve a number of approaches for integrating works of art into a studio curriculum (Irvine, 1984). Arts Propel models how production, perception, and reflection can be interwoven (Gardner, 1989). Broad-based structures, derived from the study of contemporary works of art, can suggest ways to integrate multiple points of view into media-based studio investigations (Sessions, 1998).

BETTER PRACTICE
Teachers who integrate studio practice and creative expression with art history and critical response promote greater learning in both areas of performance.
**Practice**

A study conducted with high school students was designed to examine the notion, often held by art teachers, that devoting time to art historical and critical investigations will diminish studio practice. Tomhave (1999) concluded that students who had the advantages of a studio experience enriched by art history, criticism, and aesthetics produced studio work commensurate with a control group that had a more traditional program focused primarily on studio work. Bodenhamer (1991) found that high school students in Art III and IV demonstrated heightened critical judgment and better comprehension as a result of an integrated approach to studio investigations. In this study, critical thinking, writing, and production were integrated with a study of the visual arts within society and a historical context. Although the quantity of student artworks dropped significantly, the quality remained high and possibly improved (p. 24).

Conversely, connecting studio practice to the study of art history results in more in-depth understanding of works of art. Day (1969, 1973, 1976, 1988) reported that secondary students who explored related art concepts through studio activities learned more about a given period of art history than when they received art historical material alone. Day suggests four reasons justify these findings. First, when art history instruction is infused with art making, learning becomes active rather than passive. Second, as students attempt to resolve problems in making art similar to those confronted by the artists of the period being studied, they may reexamine the artwork of that period with fresh eyes. Third, art-making activities typically encourage informal student discussion. Properly directed, these discussions provide opportunities for the reinforcement of what has been learned from the art historical material. Fourth, through their own artistic efforts, students may discover the nature and magnitude of the artists’ contributions of the period and discover new affinities for and relationships with artists and movements.

Beyond the integration of studio practice with art appreciation, an even broader foundation for art education methodology may exist. Sessions (1998) makes the case that relevant and comprehensive education for students engaged in studio practice, specifically in this case with ceramics, might draw on as many as eight contextual avenues. Based on an analysis of contemporary works in ceramics, she identifies these avenues as including Cultural/Historical Foundations, Function, Philosophical Issues, Visual Qualities, Art World Connections, Production Conditions, Technical Components, and Sociological/Ideological Issues.

**Better Visual Arts Education**

A broad exposure to art helps develop a repertoire of ideas about the forms art can take and the manner in which ideas and materials work together for expressive purposes.
**Recommended Strategies**

The following strategies can be deduced from Day’s (1969/1988) conclusions:

- Design subject matter presentations tailored to the students’ optimum attention span.
- Engage students with aesthetic problems similar to problems explored by the artists under study.
- Reinforce subject matter or art historical concepts through casual discussion while students are engaged with their own original artwork.
- Encourage students to reexamine artwork that inspired the studio investigation to identify what they have discovered or realized about those artworks from engaging with a similar problem.

The following approaches for choosing artworks, each with its own purposes, are identified by Irvine (1984):

- Referential, chronological, stylistic, topical, specific interest, specific artist, collection related, integration with a theme from another art work, multidisciplinary in relating to another discipline, and cultural enrichment (p. 17).

The following is suggested by Sessions’ (1998) study:

- Analysis of contemporary works in a given medium may reveal dimensions of learning and substantial information that can be used in curricular planning.
- Craft programs can be revised to include educational concerns beyond the conventional focus on techniques and self-expression.

The following recommendations are noted in an article by Pistolesi (2001) in which contemporary postmodern works informed the art-making investigations of her art education students:

- Teach with ideas: Without content, art and art education become visual expressions of superficial, vacuous one-liners.
- Aim for masterful delivery of ideas: Visual ideas must be delivered in powerful, masterful ways and may have everything or nothing whatever to do with traditional forms.

The following insight can be drawn from Mann (2002) and Cherry and Mellendick (2002):

- Works of art, from the history of art and its contemporary forms and by individual artists, inform students about the possibilities of dealing with themes, media, stylistic conventions, and ideas.
A balanced comprehensive art curriculum makes sense. 

Education Leadership 45


Article argues for and describes an approach that integrates response and creative expression, it is designed to accommodate self-expression, study of the role of art in society, and art historical investigations. 


Studies in Art Education, 30 (2), 71-83. 

Article introduces the Arts Propel approach to curriculum and assessment in the arts in terms of its intellectual origins and its particular mix of components. 

Discusses Goodman’s philosophical theory of symbols and research in cognition associated with science and problem solving as well as psychological issues. 

Acknowledges developmental assumptions and restates origins of Gardner’s theory of multiple intelligences. Presents, in contrast to DBAE, assumptions that underpin an approach based on the development of three kinds of competencies: Production, Perception, and Reflection integrated into domain projects. 


Although this book addresses elementary students, its pragmatic section on combining studio and art history (Chapter 2) is equally applicable to secondary students. (A sequel to this book, reporting on 25 years of art appreciation practice since 1977, has been written by the original authors, and publication is anticipated.) 


Art Education, 37 (3), 16-19. Connects 10 different approaches for choosing artworks for specific purposes ranging from inspiring the creation of art to understanding art, artists, collectors, cultures, and relationships between art and other art forms as well as other disciplines. 


Art Education, 39 (6), 10-13. Article argues for and describes an approach that integrates response and production. 


Educational Leadership 45 (40), 18-22. 

As the state supervisor for art who oversaw the development and implementation of the Ohio Curriculum, Tollifson discusses the rationale for a comprehensive approach that embraces both critical response and creative expression. 

REFERENCES 


A classic methods text containing philosophy, theory, and models for practice emphasizing a comprehensive and integrated curriculum. Based on critical response and creative expression, it is designed to accommodate self-expression, study of the role of art in society, and art historical investigations. 


Studies in Art Education, 30 (2), 71-83. 

Article introduces the Arts Propel approach to curriculum and assessment in the arts in terms of its intellectual origins and its particular mix of components. 

Discusses Goodman’s philosophical theory of symbols and research in cognition associated with science and problem solving as well as psychological issues. 

Acknowledges developmental assumptions and restates origins of Gardner’s theory of multiple intelligences. Presents, in contrast to DBAE, assumptions that underpin an approach based on the development of three kinds of competencies: Production, Perception, and Reflection integrated into domain projects. 


Although this book addresses elementary students, its pragmatic section on combining studio and art history (Chapter 2) is equally applicable to secondary students. (A sequel to this book, reporting on 25 years of art appreciation practice since 1977, has been written by the original authors, and publication is anticipated.) 


Art Education, 37 (3), 16-19. Connects 10 different approaches for choosing artworks for specific purposes ranging from inspiring the creation of art to understanding art, artists, collectors, cultures, and relationships between art and other art forms as well as other disciplines. 


Art Education, 39 (6), 10-13. Article argues for and describes an approach that integrates response and production. 


Educational Leadership 45 (40), 18-22. 

As the state supervisor for art who oversaw the development and implementation of the Ohio Curriculum, Tollifson discusses the rationale for a comprehensive approach that embraces both critical response and creative expression. 

R E S E A R C H 


In this observer-participant study, the database consisted of two classes of Art III and IV. Difficulties reported included student resistance to art appreciation and study in a studio art class. In the end, students produced less work (approximately 50%) yet maintained a high quality in the work they did. Some indicated that they learned more about art through this integrated approach and urged the teacher to continue using it. 


Dissertation Abstracts International, 34, 4370A-4371A. 

Students in high school art classes were given art-making, art history, and art criticism instruction focusing on these art styles: Impressionism, Abstract Expressionism, and Op Art. As a result of the instruction, students’ preferences and judgments (measured separately) increased for the art styles about which they had learned. 


This is a research report of the above dissertation study. 


Reprinted from Studies in Art Education, 10 (2), 57-65. 

This paper reports the results of a research study that implemented art history into the junior high school art curricula under two treatment conditions: lecture-slides alone (control group) and lecture-slides integrated with art-making activities (experimental group). Tests of art history showed the experimental group scored higher than the control group. 


Study is based on the analysis of five contemporary works in ceramics yielding insights about a structure for the world of ceramics. Included in the investigation was a case study of a high school discipline-based art education ceramics curriculum that illustrated the difficulty of carrying out a smooth translation of curricular models based on two-dimensional European fine art. 


The study was designed to determine whether time devoted to art history would weaken studio performance on Advanced Placement exams. Data base included 120 students. Tomhave found that students who experienced a studio program enriched by art history, criticism, and aesthetics scored as well as those who received a studio-based program not so enriched. 

R E P O R T S F R O M P R A C T I C E 


School Arts, pp. xx-xx (special pullout without page numbers). 

Article offers accounts of a collaboration by an artist and an art teacher. “Out of the Box” is described as an investigation inspired by Cherry and his sculpture and conducted with Mellendick’s middle school students. The collaboration was designed to meet the countywide curriculum mandate for eighth grade of refining aesthetic judgments through master approaches. 


School Arts, pp. 29-31. 

Mann describes how turning to the history of art for examples of how artists have dealt with tragedy and war provided students with ideas about how they might process, through individual digital works and a collaborative installation, their reactions to 9/11. 


Article reports how a study of contemporary artists inspired student collaborations and installations in response to the earthquakes that leveled the campus at California State University, Northridge. 


School Arts, pp. 47. 

A seasoned teacher reflects on the balance and integration needed for good instruction. Finds that a healthy mix of interesting subject matter, challenging but not too difficult media, famous artists and styles, and an appetite for creativity contribute to a good lesson and sustainable teaching. 

B E T T E R V I S U A L A R T S E D U C A T I O N
Designing Reflective and Holistic Instruction

**Better Practice**

Teachers who develop reflective and holistic practices help students understand critical and creative processes and promote self-awareness and deep learning.

**Theory**

Learning is a complex process. What students learn is shaped not only by the content and avenues of investigation offered through instruction but also by the degree to which reflective behaviors are developed (Martens, 1992) and by the way learning agendas are formed (Staggenborg, 1991). Further, finding ways to align students’ mind, body, and spirit in the process of making art may promote deeper learning and personal growth (London, 1989, 2003; Dodson, 1998; London, Castro, & McKenna, 2002; McKenna, in press a, in press b; Castro, in press). A learner-centered approach invites reflection and deep and personal engagement, employing the arts and the imagination in opening up new insights and connections (Burton, 2000).
Martens (1992) suggests that a thinking skills taxonomy, as a tool for reflective practices, has the potential to positively affect students’ perceptions of their own learning. Those students who became effective in using reflective processes grew in their ability to control their own capacities as learners. Specifically, students took ownership of their work, deciding when it was successful and how it met the criteria of the problem. Further, insights from reflective practices allowed students to push the learning process of the studio experience beyond the limits of the subject matter of art. In contrast, those students who were reluctant to engage in reflective behaviors seemed unable to make a serious commitment to their own learning process, appeared to be interested primarily in immediate gratification, and were dysfunctional in their total education experience.

Staggenborg (1991) suggests that deeply held student agendas and interpretive strategies seem to determine the degree to which they learn, make connections, take risks, and think about ends served by the creative process. He notes that certain aesthetic stances and learning styles as well as pedagogical choices can make an impact on creative growth and development.

Studies of holistically conceived encounters suggest that deep learning, through art, is possible through a holistic approach (London, Castro, & McKenna, 2002; McKenna, in press a, in press b; Castro, in press). Such an approach usually involves an introductory activity that is centering in nature; it calls attention to the body, the mind, and the spirit using warm-ups or exercises to bring all aspects of the self into the creative process. Music, movement, breathing exercises, silence, and simple tasks that call for reflection and choice making can be used. Attention is drawn to the sensory qualities of materials. Existential questions can be used to shape creative responses. Examples might include: Who am I? What path did I take to get here? Where am I going? How do I see the world? and How might I make an homage to another? Processes for sharing and responding to work are reflective, dialogic, and discursive, rather than critical. As a result, visual form usually takes care of itself and a conversation about composition and design is deferred in light of other, more personal and significant discoveries and responses.

Recommended Strategies

The following strategies can be deduced from the study by Martens (1992):

- Clarify expectations regarding the teacher’s role and the student’s role at the beginning so that verbal reminders of responsibilities are unnecessary.
- Focus on thinking, problem solving, and decision making; share one’s own thinking process and encourage a dialogue using the Socratic method: Ask students to think through a problem rather than giving them the answer.
- Use a thinking skills taxonomy that emphasizes recall, analysis, comparison, inference, and evaluation. (Martens used Measuring Thinking Skills in the Classroom by Rick Stiggins of the Northwest Regional Educational Laboratory.)
- Encourage the use of student and teacher journals for reflection.
- Discuss a schoolwide commitment to reflection on creative and critical thinking with colleagues and school instructional leaders.
The following strategies might be drawn from the studies by McKenna (in press), London, Castro, & McKenna (2002 a in press, b in press), and Castro (in press):

- Begin by establishing an atmosphere of trust and regard for each individual.
- Develop ways of stimulating reflective personal engagement in conjunction with an artistic problem. Model that engagement for students.
- Use an existential question to launch a studio investigation, one that is self-referential and will make students stop and think before proceeding.
- Work to create a community of supportive artists rather than a competitive environment in the classroom.
- Coach and support students through the process of making work that is personally meaningful.
- Create opportunities to reflect on the work, including class discussions and modeling a dialogue with an individual student as a preface to small peer group discussions. Invite students to indicate what kind of feedback or response they are seeking.

The following insights can be drawn from Staggenborg’s 1991 inquiry:

- To make a commitment to fostering a student’s holistic growth, teachers need to adapt insights from contemporary aesthetics into actual pedagogical evaluation and practice.
- The formation of an aesthetically enlightened curriculum and pedagogical practice will have to champion respect for each student’s individuality at every moment.
- Such a curriculum will begin with an awareness of each student’s repertoire of interpretive strategies and proceed from there, seeking to expand, not replace, that repertoire.

REFERENCES


Boston: Shambala.

Burton argues for a learner-centered approach to education in which students are invited to bring their own experiences into the arena of learning and asked to reflect on and explore possibilities that engage their thinking. Further, they should be offered skills and insights in the arts where imagination can open new corners of reality, helping them construct continuity between their creative efforts and the culture in which they live.


Theoretical and philosophical underpinnings of a holistic approach are discussed. Book includes 12 encounters that model the approach with adult learners who range from novices to artists.


A recounting of methods and observations drawn from workshops conducted with adult learners testing the possibilities of drawing closer to nature.

RESEARCH


A qualitative study examining how cohesive, highly structured art encounters based on existential questions work to address issues of ultimate concern in a nonjudgmental atmosphere. Findings suggest the approach is viable and effective, offering unique opportunities for students to experience art’s original and deeper functions.


Abstract of paper presented at the 2001 NAEA conference. Describes a qualitative study comparing the nature of peak experiences in art with Wilber’s concept of levels of consciousness and Jung’s principle of Synchronicity to identify how transpersonal and elevated experiences take place through art.


This observer-participant study was designed to investigate the relationship of critical/creative thinking skills to a student’s understanding of process in the production of art. The data base consisted of eight students in the second semester of an Art 3-8 class; all showed significant increases in posttest responses demonstrating recall, analysis, comparison, inference, and evaluation. Martens concluded that this taxonomy was simple enough for high school students to understand and apply and that the visual arts tap all levels of the taxonomy. Further, the activities caused students to think about their own creative decision making and problem solving. Evidence suggests that reflective processes help students grow in their ability to control their own capacities as learners and provide insights useful beyond the subject matter of art.

As an English teacher, Staggenborg followed eight seniors taking Advanced Placement Senior English including music, theater, and dance majors at the Milwaukee High School of the Arts. While none of the case studies involved visual arts students, the findings have relevance for all students engaged in the arts. Staggenborg voices a concern for student development through ever more mature processes of artistic envisioning. Employing a hierarchy of sequential stages found in aesthetic understanding and artistic creation, he discovered that the rigidity of a student’s critical stance could severely limit a student’s aesthetic and creative growth. Students who made significant strides in terms of critical skills placed a high priority on daydreaming and empathic relationships with other people. Further, a change in pedagogical approaches, such as switching from a traditional quantitative grading system to a qualitative one, proved beneficial in freeing students to take more risks.

REPORTS FROM PRACTICE

Castro, J. C. (in press). Responding to existential questions: An holistic approach to teaching photography. In P. London (Ed.), A report from the study group for holistic art education. Baltimore: Center for Art Education at the Maryland Institute College of Art. Article recounts an effort to use holistic methods in the teaching of high school photography. Noting the challenges of working with a highly technical medium, Castro reports personally meaningful work resulted from the use of existential questions, causing students to think more deeply before initiating work. Further, he notes the development of a supportive community among students as a special dimension of a holistic approach.

Davidson, M., Casier, K., & Albertson, C. (2001). Toward a pedagogy of care in art education. Presentation, NAEA Conference, New York City. Presented ways in which art becomes a pathway to engagement, how dialogic teaching can make connections between art teachers and learners, and how one approach to ceramics proved successful for students with learning disabilities, creating a healthier, more nurturing, and more holistic environment for learning.

London, P. (Ed.) (in press). A report from the study group for holistic art education. Baltimore: Center for Art Education at the Maryland Institute College of Art. A limited number of copies of the monograph are available through the Center.) A monograph with a preface by London and articles generated from the first year’s inquiry by art teachers participating in a study group. London provides an introduction to theory and practice related to holistic art education. Participating teachers experimented with various holistic approaches, drawing insights for K-12 practice from their inquiries.


McKenna, S. (in press, a). Assignment: Make art, make friends. In P. London (Ed.), A report from the study group for holistic art education. Baltimore: Center for Art Education at the Maryland Institute College of Art. McKenna realized advanced students did not know each other well and invented an artful problem that required peers to develop new relationships and then to pay homage to the person they discovered through a three-dimensional portrait. To model the questioning process she wanted pairs of students to engage in, McKenna offered to answer questions about her professional and personal life that students were curious about. Questions were respectful and allowed her to share her life as an artist, traveler, and teacher. The resulting work was pursued with enthusiasm, creative in the use of materials and form, and of a high quality. New connections were made among the group and a stronger sense of community developed in the class.

McKenna, S. (in press, b). Changing the mood: How to add personal meaning to an ordinary design problem. In P. London (Ed.), A report from the study group for holistic art education. Baltimore: Center for Art Education at the Maryland Institute College of Art. Here McKenna reports a holistic approach that transforms “an ordinary color and mood” exercise into a more personally meaningful experience by simulating an extraordinary context and creating conditions for self-referential choices that are ultimately reflected in color studies.
The term “transcultural” suggests human values and beliefs, questions and concerns, transcend individual cultures. Dissanayake (1988, 1991, 1992, 2000) provides a bio-behavioral view of the arts that supports a transcultural approach. She makes the case that the arts originated with early humans who needed to develop a sense of “grouponeheartedness.” Making objects and rituals special gave visual and dramatic form to beliefs and values. Further, doing so appears to have contributed to survival through solidarity and a unified sense of mission. She notes that only in most recent modern times have the arts become the domain of specialists, removed from everyday life, often preoccupied with creating works that serve personal or even ambiguous ends. For most of human history, the arts served common needs and developed out of human propensities that all races and cultures share, such as an interest in the use of tools, responsiveness to novelty, a desire to communicate and engage in activities that strengthen the bond with others, a fascination with elaboration, a capacity to think about the past and future as well as the present, and an interest in passing on beliefs and values to future generations.

Lippard (1990), in looking across cultures at non-mainstream artists, and particularly at artists who had moved from one culture to another, discovered some common needs addressed through the arts. Among broad purposes served by art she found the following: finding and claiming self-identity, mapping one’s journey, telling one’s stories, understanding where one has landed, mixing with others, turning around ideas, and dreaming. Given that the developmental social and emotional needs of students are often similar to those of artists who are women and persons of color, Lippard’s research suggests the merits of drawing on a broad range of artworks from the “hiddenstream” as well as classics from the mainstream.
It may be insufficient and even problematic to study the art of “others” without somehow finding commonalities in needs and purposes (McFee, 1961). Only then can the creative solutions that arise out of diverse conditions, needs, and possibilities be appreciated at a transformative level. If “multicultural” is intended to mean “success for all,” it cannot afford to deal only with diversity and differences. Real success for all may require a transcultural approach in which the development of tolerance, acceptance, curiosity, and respect for the entire human race is an important goal.

Collins and Sandell (1992) caution against simplistic or romantic approaches that ignore the notion that all cultures have positive and negative aspects and that art often reveals inequities in power relationships. They offer examples of efforts in which the arts play a significant role in the critique of culture and its transformation. A “transformative response envisions a new common culture, one without violence, oppression, and inequality—a culture which would not only tolerate but welcome the definitive cultural participation of individuals and groups with disparate cultural heritages” (p. 12).

Multiculturalism, cross-cultural studies, and transcultural approaches, by their very nature, aim to go well beyond making surface adjustments in images that are shown to students. Many concerns have been voiced. For example, cultures must not be trivialized by projects that reduce meaningful objects and rituals to formal qualities, simple materials, and mimicry. Information needs to be accurate and drawn from appropriate spokespersons and authorities.

There are constraints and problematic issues to be confronted. For example, the world of art is so large and complex that one can hardly hope to be an expert on even a small portion of it. Much of the existing information needs to be reviewed with a critical eye for its biases and accuracy. Just the language alone suggests that unequal power relationships and inequities related to gender, class, race, and ethnicity are at work here. It is loaded with opposites such as mainstream vs. hiddenstream; high art versus low art; dominant versus oppressed; empowered versus silenced; majority versus minority. In contrast, the goals associated with a transcultural approach speak of affirmation, acceptance, enculturation, tolerance, empowerment, social democracy, social action, and reconstruction.
**Practice**

Often the imagery shown to students is determined less by purpose than by what is actually available. Very practical matters enter into this proposition: what images are available in the school, what funds teachers have to purchase additional reproductions, what teachers have in their own personal collections, and what is available from publishers. Lack of funds for visual resources and shortage of artworks that “look like” or represent a given student population play a major role in limiting the study of visual images as well as the goals that can be achieved (Gaither, 1998).

Reports from practice suggest that deliberate choices and processes can affirm students’ own cultural heritage through the process of recalling, transferring, and synthesizing (Hendricks, 2001). It also is possible to help students develop an appreciation for cultures different from their own (Fehrs-Rammpolla, 1990). An in-depth exploration of a specific culture and its artistic traditions through art and social studies also appears to help students retain both details and concepts (Webster, 1991 Fall).

The following suggestions are based on the writings of several authors including Anderson (1995), Tomhave (1992), Stuhr, (1994), and Wasson et al. (1990):

Be aware of your own cultural and social biases, and recognize that teaching inherently involves cultural and social intervention. Examine your own attitudes toward gender, race, socioeconomic class, age, religion, ethnicity, and mental and physical abilities.

Be aware of different agendas, identify intentions, and select strategies that will help achieve them.

The following strategies can be drawn from Gaither (1998):

- Conduct an analysis of existing visuals and references available to students.
- Scrutinize commercially produced materials for the presence of stereotypes.
- Consider the effects of habituation, the result of seeing the same material over an extended period.
- Conduct research and develop ways to expand the repertoire of images for learners to encounter.
- Replace improbable, inaccurate signage for displays such as “African masks made by (American) fifth graders.” Reconsider the practice of having students make objects based on borrowed formal qualities using simple materi-

For most of human history, the arts served common needs and developed out of human propensities that all races and cultures share.
als and minimal understanding of the significance of the beliefs, values, and purposes involved by the originating culture.

- Consider identifying students’ needs first and then finding models that might inspire them to make objects that have meaning to them.

- Consider thematic approaches to the selection of works that allow for a transcultural selection; choose works that focus on common human needs, concerns, and questions while highlighting the resourcefulness and creativity of specific peoples.

- Conduct research to enhance your knowledge and understanding before making the choice to study given cultures, objects, rituals, and traditions with students.

The following strategies can be drawn from Stuhr, Petrovich-Mwaniki, and Wasson (1992):

- Involve students in a culturally responsive situation analysis. Rely on the students and the community for information. Look to local sources for information including people, places, organizations, and objects. Develop inventories and questions for gathering information.

- Choose content that is culturally relevant and has the potential to provoke social and critical inquiry.

- Involve students in identifying important social issues, gathering data, clarifying and challenging their values, making reflective decisions, and taking action to implement their decisions.

- Evaluate the implementation and outcomes of the curriculum.

The following strategies are suggested by Purcell (1991):

- Scrutinize textbook information for insufficient, outdated information and the presence of stereotypical models and suggestions.

- Make use of outside speakers and community resources.

- Find opportunities to engage in in-service programs or travel-study programs.

- Develop oral and written facility with relevant foreign languages.

- Engage students with a range of objects beginning with an investigation of their own culture, learning to appreciate their own heritage and how it is manifest in objects, rituals, beliefs, and values.

- Broaden exposure to a variety of cultures to cause students to appreciate the unique and special ways human beings have used their creativity and resources in artful ways.

- Direct students to compare and contrast their own culture with others so that they might see “across” many cultures to discern attributes common to all people.

Strategies recommended by Deasi (2000):

- Discuss the inability to understand all aspects of a different culture despite accurate and authentic representations of that culture.

Strategies suggested by Collins and Sandell (1992):

- Incorporate the use of works that model the transformative potential of art to explore our common anotherness.
REFERENCES


Paper proposes a model for cross-cultural art criticism drawing on anthropological, utilitarian, decorative/aesthetic, and play/fantasy/education. It also recounts various functions of objects as they are related to food, shelter, social relationships, symbolic communication, territory, cosmology/religion, health/healing, leisure, fertility, labor/work, relationship to natural environment, protection, commerce/trade, and education/training. Anderson concludes that the value of cross-cultural criticism lies as much in the act of doing it as in what is discovered. Examining the ways others do things may also shed light on unexamined cultural assumptions of one’s own.


Reference that provides a context for the concept of the ‘hiddenstream’ of art. Explores issues related to art education and sex equity, the Women’s Movement, and Feminist Art Education. Also examines women’s achievements in both the mainstream and the hiddenstream as well as practical strategies and resources for teaching. Offers source lists of women artists and related publications.


Article considers three stances in multicultural education: the attach response, the escape response, and the repair response as a preface to considering the merits and challenges of a pluralist response, which would contribute to the development of a new and better common culture.


Rather than work from the notion of art as communication, Congdon suggests an alternative approach that takes into consideration how members of the culture viewed and experienced the world. She also recommends drawing art criticism formats from varying cultural groups to find ways of interacting with objects and artists that are more appropriate than models invented by Western academics. She concludes that the study of language systems and art objects as they represent ways of viewing the world is a direction worth taking. Article contains discussions related to various objects from different cultures.


Paper discusses the direct connection between the issues of power and dominance and the role of representation in shaping an understanding of other cultures. Suggests that teachers discuss the imbalance of understanding all aspects of a different culture, despite accurate and authentic representations of the culture.


The above four publications by Dissanayake present an unfolding investigation of the origins of the arts and their significance as a human behavior. *Art and intimacy* includes a section, “Taking the Arts Seriously,” which discusses implications relevant to visual arts education.


Discusses the cross-cultural process taking place in the work of Latino, Native-, African-, and Asian-American artists. Illustrated with examples of artwork framed by a discussion of cultural concepts, ideas, and meanings.


Classic methods text that explores convergence of two notions: the variables within a group of students and an interest in art as a human behavior. Explores art in culture, children’s individual differences in art and development in art, environmental factors in children’s work, the creative process, and theories of child art. All are presented as preparation for developing an elementary art curriculum. Book includes a discussion of McFee’s perception-delineation theory in which a child’s readiness for art is related to a number of variables, all with implications for practice. Such variables include the child’s flexibility or rigidity, orientation to space, perception and organization of information, attitudes and values about art absorbed from the child’s culture, and prior learning.


This book contains essays presented at a 1991 symposium held in Columbus, Ohio, by the United States Society for Education through Art. Includes a major address by Suzi Gablik as well as discussions that range from clarifying multicultural terminology to the problem of authenticity and simulation in student-made and commercially produced ethnic and multicultural art.


Five forms of multiculturalism are explained in relationship to art education in order to distinguish goals ranging from improved performance of disenfranchised ethnic students to improved human relations to social reconstruction. She notes that some approaches are consistent with maintaining the political, economic, and social order as it exists while only two (or three) “offer a possibility for social reconstruction that would affect sociocultural groups in an equitable and positive manner” (p. 177). A vision of each of the five approaches as it might be realized in art education is offered.


Article offers six position statements for implementing a multicultural approach. Begins with the assumption that many teachers may lack the experience of operating in the many cultures in which their students participate. Provides practical guidelines including suggestions, an inventory of where to find information in a local community, and questions for interviewing artists and studying art forms. Also includes steps for students to use in studying the art of various sociocultural groups, including their own.


Recommends a socio-anthropological basis for studying the aesthetic production and experience of cultures, focusing on the maker as well as the context, using a student/community-centered educational process and anthropological methods, choices that democratically reflect and represent sociocultural and ethnic diversity, and a focus on the complex factors that affect human interaction. They also stress that teachers should be aware of their own cultural and social biases as teaching itself constitutes cultural and social intervention.
Wolff, J. (1990). Questioning the curriculum: Arts, education and ideology. *Studies in Art Education, 31* (4), 198-206. Essay raises questions regarding simplistic solutions to constructing a cultural education. Cautions that “institutions of culture and of education are founded in basic inequalities and power relations in society, and in various complex (and sometimes contradictory) ways, they confirm and maintain those inequalities and relations” (p. 198). Argues that a heritage pervaded by inequalities of class, gender, race, and ethnicity requires art educators to encourage a cultural perspective that relates contemporary values to the historical forces that shaped them.

**RESEARCH**

Davenport, M. G. (2001). Opening up the world: A portrait of an intercultural art teacher. Unpublished doctoral dissertation, Indiana University. DAI, 62, no. 08A, p. 2663. Case study designed to examine traits evident in a teacher with experience teaching and living abroad. Noted were a sense of cultural relativism, ways to use technology to cross borders, a passion for other cultures, compassion for students, and an informed respect for local cultural traditions.

Fehrs-Rammpolla, B. (1990). *Affecting student critical thinking and aesthetic attitudes utilizing the ceramic arts of non-western cultures.* New York: National Arts Education Research Center at New York University. Reports the findings from an experimental, observer-participant study in which a unit of Japanese pottery was taught in an Art I high school class. A pre-post method of evaluation yielded findings of increased responses toward and acceptance of non-Western works as well as an increase in the amount of time students invested in written assessments.

Fehrs-Rammpolla (1990) found that introducing students to objects from a non-Western culture positively affected students’ critical thinking and aesthetic attitudes. In this example, a unit on Japanese pottery was incorporated into an Art I class that resulted in more positive responses toward and acceptance of non-Western artworks.


Stout, C. J. (1997). Multicultural reasoning and the appreciation of art. *Studies in Art Education, 38* (2), 96-111. A postsecondary case study discussing how critical thinking and constructivist theory foster multilogical reasoning in art. The synergistic relationship between cognitive abilities and affective dimensions in critical thinking is illustrated. Author maintains that critical thinking is necessary for the development of diversity appreciation and multicultural awareness. The viewer’s story as well as the story of the artist and the work appear as an important strategy in unlocking feeling and meaning.

Tomhave, R. D. (1992). Value bases underlying conceptions of multi-cultural education: An analysis of selected literature in art education. *Studies in Art Education, 34* (1), 48-50. Using six conceptions drawn from general education, art education literature was analyzed in order to separate, clarify, and analyze positions that have been posed within art education. Each conception, with its goal and strategies as well as negative liabilities that should be avoided, is discussed. The reference list is an extensive compilation of related readings and sources examined in the study.

**REPORTS FROM PRACTICE**

Hendricks, S. (2001). A.R.T.S.: A model for multicultural art education. Presentation for the National Art Education Annual Convention in New York City. Reported positive results from multicultural instruction in art focused on students’ own heritage and cultural perspective as a focus. Hendricks (2001) reported that students used their own cultural perspectives, ideas, and experiences to analyze works of art, recall past experiences, transfer, and synthesize.

Purcell, D. M. (1991). Integrating Japanese theoretical art in the middle school visual arts program. Unpublished master’s research project, Towson State University. Information gathered from travel-study in Japan and research on Kabuki, Noh, and Bunraku theaters was used to develop and implement a series of lessons with seventh-grade classes in Baltimore County. Concluded the integrated approach was sufficiently rich to show a great deal of retention of details as well as concepts. Noted the amount of preparation needed to successfully teach with depth and the need to develop written and oral facility with language and vocabulary relevant to the culture under investigation. Suggested use of outside speakers, in-service, and travel-study tours for teachers. Cautioned teachers to carefully scrutinize textbook information for insufficient, outdated information and the presence of stereotypical models and suggestions.

Webster, D. M. (1991, Fall). Do we really mean “multicultural”? *Gazette.* Baltimore, MD: Maryland Art Education Association. Reflective article raising questions about the term “multicultural” and proposing, instead, the adoption of the term “transcultural” with the goal of helping students see “across” cultures, discerning attributes common to all people, as a way of developing tolerance and a global view.
Planning Instruction with Assessment and Reflection in Mind

**Theory**

Assessment has different ends. Its primary goal is to improve learning (Wolf & Pistone, 1995). Effectively used, assessment explores questions at the very heart of the purposes and processes of schooling (Jamentz, 1994). It can also clarify expectations for students so that evaluation is specific, fair, and equitable. Different kinds of assessment strategies can reinforce steps in a process, allowing students to monitor and improve their own work and to reflect on learning. Assessment in the arts can vary from traditional forms such as quizzes and tests to checklists, rubrics, and reflective questions. If students participate in evaluating themselves, assessment allows them to take ownership of their products, behaviors, attitudes, and insights.

**Better Practice**

Teachers who plan for assessment reinforce process, clarify expectations and criteria for evaluation, and promote reflective thinking.
Planning for assessment causes teachers to examine the kinds of learning they value and to find ways to evaluate developments in attitudes and behaviors as well as skills and knowledge. Assessment helps teachers communicate goals and criteria for evaluation with students and others, including administrators and parents, and supports grading decisions (Jasa & Enger, 1994). If teachers share samples of student work across different sections of the same course, developmentally within a program, or from different schools, they can gain a fuller sense of what can be achieved developmentally, contextually, and through different methods of instruction (Dorn, 1999). This kind of collaboration among colleagues can then inform departmental and program missions and standards.

Assessment may also be designed using district, state, or national standards as a guide (Bates, 2000; Dorn, 1999; NAEA, 1994). Large-scale assessments raise financial, practical, theoretical, and philosophical questions. While results from large-scale assessments will most likely need qualification to have real value, teachers can develop local outcomes and expectations for ongoing, authentic assessment integrated into their instructional plan (London, 1996; Marzano, 1994).

Different kinds of assessment tasks can be employed to determine the effects of instruction. Pre-tests or pre-instruction work samples that identify where students are at the beginning can then be compared with post-instruction work to make developments clear to students as well as teachers and other observers. Certain tasks can check for short- and long-term retention of facts and appropriate use of vocabulary, concepts, and information. Other tasks may invite students to apply their knowledge and understanding to familiar as well as new contexts. Many forms of authentic assessment can be built into the instructional process, while other forms, based on shared assumptions about the content of curriculum, can be administered within or outside of the instructional setting.

**Ongoing Assessments that Promote Learning**

In-progress assessments assist teachers in monitoring instruction, help keep students on track, and provide feedback at points where the work or performance can be improved. A process checklist can be as simple as a list of steps or requirements to follow in doing the work. Self-reflective questions, asking students to check their work against suggested strategies, considerations, or requirements is useful as both an instructional tool and a self-evaluation. Simple checklists can also be used to generate peer feedback and constructive suggestions.

Rubrics, which clearly identify criteria for evaluation alongside levels of achievement, can deal with a broad range of issues from processes and techniques to investment, risk-taking, problem solving, craftsmanship, design, and overall quality. Critical examination of exemplars and/or examples of student work, in order to construct a rubric, can be an instructive experience for students as well as teachers. Rubrics are useful for self-evaluation, peer evaluation, or evaluation by the instructor. A comparison of student and teacher judgments can also reveal how students inflate, diminish, or see their efforts accurately, thus informing response and guidance.

Assessment of portfolios or bodies of work is common practice among art educators. Portfolios commonly are used to present, for review, the best works produced over a period of time. Project Propel brought attention to a process-folio that documents process over time and reveals, among other things, the level of investment made by the student. Insights about how and when creative breakthroughs occurred can be gleaned from examination of a process-folio. Analyzing the process-to-product sequence is thus a valuable experience for the learner as well as an opportunity for dialogue among peers and between student and teacher (Wolf & Pistone, 1995, p. 59).

Advanced Placement exams in the visual arts have demonstrated rater reliability on judgments of portfolios given that readers have appropriate training and periodic review during the assessment project (Dorn, 1999, p. 237).

Reflective questions and critical discussions can be used for the purpose of synthesizing new information with previous knowledge and/or for evaluating process, product, and learning. Reflective thinking, often required in a written form, can double the information a teacher has to use in grading. As true with professional works of art, many products may not speak for themselves. Questions can be asked about intentions, trial and error experimentations, connections made or discovered, research, challenges, successes and failures, breakthroughs, technical or conceptual problems encountered, the development of ideas that inspire new work, and what students learned or would do differently next time.

**Performance Tasks**

Both creative expression and critical response yield products as a result of engagement with a problem. Authentic performance tasks emerge as a result of challenging problems and encounters with art. Some performance tasks have been designed to assess achievement across a grade, program, district, or state. Evidence suggests that students will perform at higher levels if the tasks are authentic, personally relevant, and embedded in instruction. Arbitrary tasks, conceived as final exams or for broad application and subject to time constraints and highly controlled conditions, may not reflect the level of performance students demonstrate when they are personally motivated and offered opportunities to be coached and supported with a time
Planning for assessment causes teachers to examine the kinds of learning they value and to find ways to evaluate developments in attitudes and behaviors as well as skills and knowledge. Assessment helps teachers communicate goals and criteria for evaluation with students and others, including administrators and parents, and supports grading decisions (Jasa & Enger, 1994).

frame that allows for reflection and revision (Marzano, 1994; Guskey, 1994). While certain information can be gleaned from these more arbitrary assessments, results should be compared with more long-term performance to see if they are representative of, higher, or lower than levels typically demonstrated or achieved. As motivation clearly affects a student’s level of investment and engagement, an alternative method is recommended by Dorn (1999). He suggests that teachers receive training in evaluating performance on authentic tasks embedded in the curriculum during a course of study (2002).

Outcomes Assessment

Outcomes are broad-based expectations that provide the overall framework for instruction. Eight common ones were identified in a study of schools (Marzano, 1994), including knowledgeable person, complex thinker, skilled information processor, effective communicator/producer, collaborative/cooperative worker, self-regulated learner, community contributor/responsible citizen, and tolerant learner/culturally diverse learner (p. 45). Dorn found subsets of proficiencies within each outcome around which assessment, curriculum, and instruction were organized, forming the basis for outcome-based performance assessments. Once a task was constructed, rubrics could be designed for the various proficiencies embedded in the task. Constructed with or presented to students before they begin the task, the rubric identifies characteristics of performance along a fixed scale.

Developing course outcomes takes considerable time and energy, writing and rewriting. One arts high school used criteria in creating its set of outcomes. The school saw an outcome as providing a picture of the student behavior that would result from learning: describing long-term learning; reflecting discipline standards beyond the school setting; acknowledging different learning styles and forms of intelligence; understandable for students, parents, and community; developmentally appropriate; addressing higher-order thinking skills; and directly or indirectly assessable (Jasa & Enger, 1994, p. 31).

National Assessments

Two forms of assessments for art involve the scoring of artwork and have long track records for rater reliability. Both Advanced Placement (AP) in art and International Baccalaureate (IB) assess student work created in high school. Each has its own process and criteria for evaluation. Advanced Placement has an art history exam and several versions of the studio portfolio exam. AP uses three general criteria for evaluating work: basic skills, concentration, and quality. IB evaluates for imaginative and creative thinking and expression, persistence in research, technical skill, understanding of fundamentals of design, and understanding of the characteristics and function of chosen media (Brown, 1998).

Research in the Classroom

Day (1985) identifies other methods of assessment that might be tied to more comprehensive investigations and research in the classroom. These include observations, interviews, discussions, performances, checklist questionnaires, tests, essays, visual identification, attitude measurement, and aesthetic judgment. In addition, other forms of assessment can be used, including analysis of work samples, case studies, comparisons of control and experimental groups, and more. Research in the classroom can be conducted by individual teachers, teams or cadres of teachers, study groups, and research specialists.

Recommended Strategies

Review current methods of assessment. Consider ways to make expectations clearer through rubrics. Help students monitor their own progress with checklists and learning logs and by keeping a developmental portfolio of dated work and...
periodic reflective commentary and/or a process-folio documenting the development of ideas, experiments, plans, and working up to a final product. Check to see if assessment criteria are aligned with intended outcomes. Revise or strengthen as needed (Dorn, 1999, 2002; Dodson, 1985; Edwards, 1989; Hicks et al., 1996; Wolf, 1988; Wolf & Pistone, 1995).

Embrace the opportunity and challenge to revisit educational goals. Most of the benefits of assessment come in the dialogue and process that surround the act of creating them (Jamentz, 1994, pp. 56-57).

Participate in a recursive series of activities—designing assessments, testing them, and revising them. Check to make sure what is being evaluated is important (Jamentz, 1994, pp. 56-57).

Look for opportunities to translate standards into instructional plans tailored to a given student population (Jamentz, 1994, pp. 56-57).

Design assessments that provide clear guidelines for students about teacher expectations, reflect real-life authentic challenges, make effective use of teachers’ judgment, and allow for student differences in style and interests (Marzano, 1994, p. 44).

Look beyond product to other dimensions of performance for proficiencies to evaluate (MacDonald, 1993). Consider demonstrated attitudes, behaviors, effort and investment, cooperation, responsibility, leadership, acceptance of constructive criticism or direction, offers of constructive feedback to peers, creative thinking, risk-taking, experimentation, and problem solving.

Look at different models to get ideas for outcomes and proficiencies. For example, Arts Propel identified three major outcomes, each with its own subset of proficiencies: Production included craftsmanship, understanding, inventiveness, commitment, and expression; Reflection focused on the self as artist, critique, and ability to make use of feedback; and Perception involved the abilities to discern qualities in artwork, visual sensory perception of the environment, and cultural awareness (Wolf & Pistone, 1995, pp. 59-60). Different kinds of programs offer ideas for affective indicators such as “joy” (Bedwell, 2000).

Develop rubrics that are specific as these are more reliable than more general ones (Marzano, 1994, pp. 47-48). Decide on age-appropriate terminology for the number and descriptors for levels of achievement. Younger children need three levels whereas more complex performances of older learners may use four or five levels and range from unsatisfactory to distinguished. To make the arduous task of constructing a rubric easier, recall specific students or use work samples to envision levels of performance. Note that the easiest levels are the highest and lowest (one can start with these) and that the more challenging levels to describe are at mid-level and subject to inconsistencies and variables in performance (Jasa & Enger, 1994, p. 32).

Use assessments in the context of specific performance tasks as these promise to be more valid than retrospective judgments, which appear to be highly influenced by students’ overall academic performance (Marzano, 1994, pp. 48-49).

Develop the capacity to evaluate work. Think about what students know and what they still need to learn (Jamentz, 1994, pp. 56-57).

Collaborate with peers on the analysis of student work, and plan instructional improvements (Jamentz, 1994, pp. 56-57).

Build students’ capacity to use assessment in their learning. Check to see that criteria and standards are clearly understood by students. Give them practice in using assessment, and provide opportunities to revisit and revise work (Jamentz, 1994, pp. 56-57).

Consider how to vary the assessment process to make it more engaging. For example, have students construct and administer the test to the teacher (Galvin, 1999).

Avoid using performance assessment as a final exam where there is no opportunity to make use of the data or outcomes or to get individual feedback (Guskey, 1994, pp. 53-54).

Give the process of assessment development enough time to consider how curriculum might be reorganized along with an overhauling of assessment and reporting schemes to reflect new, higher outcomes (O’Neill, 1994).
REFERENCES


REPORTS FROM PRACTICE


Educational Leadership, 51 (6), 55-57.
Article reports insights from a California study on assessment. Identifies key practices that have an impact on how assessment serves instruction. Suggests that instructional benefits come not only from having new assessment tools but also from having created them oneself.

Reports Minnesota’s State Arts High School implementation of an outcome-based education and authentic performance assessment. Article includes a sample outcome and assessment criteria from the literary arts program.

Article offers insights from three years of experience working with schools, districts, and states. Suggests that outcome-based performance tasks have promise if schools proceed cautiously. Discusses how performance assessments are important, why students don’t always do well on them, why teachers find them helpful, the reliability of specific rubrics in comparison to retrospective judgments, and the validity of these assessments.

Models for assessment were used to design an art test for eighth graders and to pilot it in one middle school. Results suggest that students with more instruction in art score at higher levels, although some evidence suggests that students with no instruction and 70 or fewer hours a year achieve similar scores in the low range. More study is recommended.

Explores reasons why a sensible-sounding proposition such as outcomes-based education has proved to be so controversial. Suggests that future efforts to develop outcomes will be defined in terms of traditional subject areas rather than transformation ones that cross the disciplines. Also projects that states will move slowly on attaching high stakes to outcomes-based education plans and that the public, while interested in school improvement, may not necessarily be looking for major sweeping changes.

Discusses what qualifies as an outcome and describes a model based on a constellation of 10 life performance roles.

MODELS FOR PRACTICE

Contains models and criteria for evaluation, including aesthetic dialogue.

This richly illustrated drawing book has process checklists at the end of each chapter and, as such, provides an excellent model for assessing the development of habits and behaviors that contribute to better drawing skills.

Chapter 7 contains models for Performance-Based Holistic Rubrics for Standards-Based Assessment in the Arts, sample scoring rubrics from Advanced Placement, rating scales for portfolio assessment, and others.

Presents a model for doing pre-instructional drawings followed by saving and dating all work for a developmental portfolio as documentation of growth.

This middle school art teacher reports on an experiment in which teams of students were invited to give the teacher the test. A reward system was created for the quality of questions and students’ ability to evaluate the teacher’s answers, keeping an eye out for correct, incorrect, and partially correct answers.

Suggests a shift from teacher-directed questions to student-directed ones so that students can move toward self-evaluation. Offers two examples from practice, student-generated questions in English at the middle school level and a learning log used in a second-grade class.

A model for developing a variety of assessment tasks in the visual arts for middle school. Specifically designed to evaluate learning resulting from the Portfolios curriculum materials, it includes tasks that involve reflective statements about works of art, prompts for generating ideas for new studio work, identification of steps in a process, and use of analogies, as well as tasks for making connections between ideas, explanations of terminology, matching techniques, demonstrating technical skills, explaining differences, reflecting on problem-solving, designing and planning creative work, and ordering events in time.

Models are drawn from all the arts to illustrate how assessment can be an episode of learning when it insists on excellence, judgment, the importance of self-assessment, the use of multiple forms of assessment, and ongoing assessment. Some of the models in the book are drawn from art teachers in Pittsburgh and the Arts Propel Project.
Using Language to Support Inquiry-based Learning

**Better Practice**

Teachers who use language in precise ways purposefully direct, enrich, extend, and support inquiry-based learning.

**Theory**

Promoting student learning is a complex proposition. Research suggests that the small details in the teaching and learning process are as important as larger choices. Good teaching requires a high level of conscious attention to what both teachers and students say and do. Developing a repertoire of particular behaviors may also ensure that responses, especially under pressure, are as equitable and fair as possible. Developmental appropriateness of language appears as an important consideration, but more so, it is the precision with which language is used that determines the extent to which it can enrich, extend, and support inquiry and the teaching-learning process.
Armstrong’s (1986) model for stages of inquiry in producing art identified a number of behaviors used by artists that can be employed by art teachers. All involve precise use of language.

In “setting a direction,” language can be used to stimulate, engage, identify a problem or a conflict, and/or channel pre-existing interests in the direction of the lesson.

Language can be used to prompt “discovery.”

“Visual analysis” questions can be used to prolong specific, detailed information gathering.

“Classification” can be used to organize new information, group facts, and react to and grasp interrelationships.

Questions that encourage students to pause and reflect on their process and preferences can help “personalize” encounters with making and responding to art.

“Hypothesizing” questions can help students review attributes of concepts formed, recall relevant concepts, relate them to each other, and personally interpret gathered information as they work to solve their art problems effectively and uniquely.

“Reordering” questions cause students to avoid premature closure and reach creative potential. They keep what students know and intend at the surface of consciousness while they consider the changes and developments occurring in their work.

Synthesizing questions encourage students to determine when to stop work and/or what kinds of finishing touches are needed.

“Evaluative” questions can guide students’ reflections, focusing on process, effective relationships, personally unique solutions, unanticipated positive results, and future directions.

Burton’s 1998 research update from the Task Force on Student Learning reports that language and verbal cues are used to direct attention, guide art making and inquiry, reinforce art vocabulary and concepts, pose questions, and cause students to pause and reflect. Students use language in a number of ways during the learning process including asking for help, information, directions, and/or ideas; airing frustration or doubt; telling stories and sharing ideas; and responding to the work of others. As teachers interact with the responses of students, teachable moments occur. As the teacher reads a student’s signal for help or willingness to think or share, language is one of the important tools, combined with body language, voice level, and level of trust, in creating a positive, constructive, productive interaction.

Colbert (1996) calls attention to another dimension of interaction and response. In addressing gender differences in the classroom with young children, she reports that research studies conducted in the 1990s still suggest that a number of teacher behaviors treat boys and girls differently. For example, teachers tend to show boys how to do things, empowering them, while they tend to do things for girls. Girls tend to be rewarded for passive behaviors, do not get equal opportunities to speak, and receive less attention and constructive feedback than boys do. Boys tend to dominate classroom discussions, have more interaction with teachers, and receive more constructive criticism along with more time to answer questions. A specific problem that appears in art classes has to do with the time allotted to work. While some girls may want more time to develop more elaborate responses to art problems, they are often hurried along because some boys are working faster, possibly because they take art less seriously. Other issues arise when students choose to sit in all-girl or all-boy groups or when girls are punished by being used as a buffer between disruptive boys. Resisting the notion that behaviors and responses are gender based, Colbert suggests that art teachers should pay attention to behaviors that inadvertently cause them to respond in a manner that diminishes either girls or boys (pp. 65-66).
Recommended Strategies

The following list of strategies, based on the 1998 research update by Burton as well as Armstrong’s (1986) and Colbert’s (1996) reports, includes a number of ways to promote learning.

- Consider how students will be invited into the learning process. For example, attention might be focused on materials, art concepts, artworks, techniques, the experiential life of students, or other issues.

- Choose motivational strategies that will lead to the desired kind of interaction, dialogues, engagement in reflection, attitudes toward inquiry, aesthetic merit, and student behaviors toward teacher and peers.

- Be aware of gender equity as well as the way learning is promoted. Consider how to encourage exploration and reflection, promote inquiry and elicitation of ideas, confirm by repeating and/or acknowledging, make meaning out of complexity, give directions or instructions, list things to consider or include, tell about process or outcomes, invite reflection, coach, discuss, stress continuity, indicate approval, and give time to students for response. Take time to observe students working to see what additional responses might be productive.

- Consider how responses to students will be set in motion and played out in the course of a lesson. Think through where you want to meet students and responses to use as they enter the room. Consider responses that might be useful for motivation at the beginning of the lesson as well as how to respond to the whole group, small groups, and individuals during the lesson and at its close.

- Attend to how students signal their need for help, advice, and attention and how they interact. Watch for verbal and nonverbal responses and behaviors. Think about how to shape students’ interaction as they solicit help from each other and respond to each other in a variety of ways.

- Consider ways to empower students’ ownership of ideas, thoughts, actions, and accomplishments as opposed to holding on to or controlling the evolution of ideas.

- Learn to recognize and respond to “teachable moments.” Strive to read these signals accurately and respond appropriately.

- Establish an ambience for learning. Use body language, voice level, rituals, and peer interaction that contribute to a sense of trust, cooperation, and community. Set up the room and organize materials to accommodate movement and accessibility.

- Consider inviting a peer or a supervisor to give feedback on interaction and response. Or videotape a lesson and analyze interaction and response from the tape. Observe master teachers to learn more about how positive and productive interaction and responses can be used to promote learning.
REFERENCES
Author proposes an inquiry model in which language is used to achieve a variety of ends, including setting a direction, discovery, visual analysis, classification, personalization, hypothesizing, reordering, synthesizing, and evaluating.

RESEARCH
A study comparing pre- and post-training use of questioning strategies reporting that an inquiry model (see Armstrong citation under references) increased thoughtful student responses.


A task force of some 17 teacher-researchers, from all levels of education and in a variety of settings, are involved in a project to gain insight into how teachers recognize or “read” development in children’s artistic endeavors (1998, p. 1). The primary method of collecting data is by videotaping classroom interactions for analysis. The review process includes looking at the tapes as a study group, first taking notice of what they are seeing followed by development of categories and identification of various indicators of interaction and response among teachers and students. As the research study group continues, it will turn its focus to case studies of investigations led by participants.

Included in this article on gender issues is data from recent studies and practical suggestions for teachers. Although the focus is on early childhood, many of the studies suggest the importance of monitoring gender issues throughout the grades.

A qualitative study conducted in two middle school art classrooms over a four-week period. Data collection focused on the ways in which students interpret lesson guidelines and the manner in which they both resist and respond to teachers’ responses. Hafeli suggests that the conversations that take place during the art-making process contribute to or influence the “meaning” of the work. Study suggests “that teacher-student conversations have the potential to be more than checking for adherence to guidelines or coaching technique or conveying aesthetic preferences” (p. 143).

REPORTS FROM PRACTICE
A developmental series of articles beginning with preschoolers and concluding with adolescents, which focuses on art making as a process of developing visual, expressive, and cognitive concepts. Models language used to promote engagement and learning with examples of teacher-student dialogues.
Developing Language Acquisition and Conceptual Development Through Art

**Better Practice**
Teachers who use language-rich explorations of visual concepts, themes, and materials, connecting visual form to feeling and meaning, can foster cognitive development in early childhood.

**Theory**
While vision develops biologically as a means of orientation, its function is more than mechanical recording. Vision, in which generalities and differences can be recognized, requires memory and concept formation (Arnheim, 1989, p. 15). Cognition starts with the most general aspects of things and proceeds from there to the particular. In short, vision involves thinking (p. 7).

The acquisition of language facilitates thought. The ability to differentiate and integrate perceptual concepts makes it possible to grasp the meaning of words, and, in turn, language acquisition supports the development of both broader associations and more precise differentiations. In short, the process of concept development is ultimately a process of abstraction (Dorn, 1999, pp. 124-125).

The following terminology is related to cognitive growth and development:

- Cognition is a class of symbolic mental activities such as thinking, reasoning, problem solving, memory search, and so forth.
- Perceptual awareness means to take notice of, observe, or detect, and to achieve understanding of that which is perceived directly through the senses, especially through seeing, touch, and hearing.
- Seeing intelligently involves seeing forms and structure, relationships, and patterns, making note of prominent and subtle qualities.
- Cognitive concepts are generalizations derived from classifying, sorting, comparing, and contrasting qualities and attributes; as such, cognitive concepts provide a way of thinking about similarities and differences as well as associated feelings and meanings.
- Art and art-like activities can play an important role in the process of developing cognitive concepts. The roots of the arts can be seen in the activities of young children (Hurwitz, 1994). The process of “making special” appears to promote
Research suggests that young children who have access to basic art materials such as paper, crayons, markers, glue, tape, paint, play dough, etc., may perform better academically in the early years of school (Baker, 1994). Specifically, explorations that include both two- and three-dimensional materials, a contrasting-opposites approach to visual concepts, and applications of concepts to themes contribute to the development of language, fine motor skills, and mastery of cognitive concepts among kindergarten children (Carroll, 2000). Drawing and the use of relevant works of art appear to develop vocabulary, perceptual awareness, mastery of visual concepts, and complex cognitive connections among students who are deaf or hard of hearing (Eubanks, 1995; Greene, 1981).

The following strategies are suggested for the development of visual concepts using a language-rich program of instruction (Carroll, 2000):

- Naming, identifying, and describing affect the development of language and increase vocabulary.
- Sorting, classifying, and differentiating increase spatial reasoning and the development of cognitive concepts.
- Finding samenesses among differences develops higher-order thinking skills, reasoning, and perceptual discrimination.
- Thinking about how the whole confers meaning on the parts and how the parts confer meaning on the whole contributes to the development of spatial-temporal reasoning, which is also fundamental in math, science, and reading.
- Associating feeling, movement, sound, and meaning with visual form develops cognitive concepts, higher-order thinking, analytical skills, and imagination.

The use of contrasting opposites in the investigation of visual form develops perceptual awareness (Itten, 1963; Townley, 1978). A pedagogical approach for exploring visual concepts through the use of contrasting opposites, multisensory investigations, and practice with language can be designed to support development of perceptual awareness, cognitive development, and language acquisition (Townley, 1978).
REFERENCES


Baker, D. W. (1990, July-August). The visual arts in early childhood education. Design for Arts in Education (pp. 21-25). Article makes the case that drawing and modeling behaviors and skills ground the ability of children to comprehend, understand, and master cognitive processes related to letters and numbers. Further that art and art-like activities ground children in the forms and processes of their culture.

Dom, C. (1999). Mind in art: Cognitive foundations in art education. Mahwah, NJ: Lawrence Erlbaum Assoc. Inc., Publisher. A review of philosophy, theory, and research related to cognition with implications for curriculum and assessment. Chapter 5 focuses on conceptual behaviors in art and offers the following insights about concepts and concept formation: a concept is defined as a mental interpretation of two or more perceptible units possessing the same character but with their measurements omitted. Concepts are identified through perceptual data, vary according to the age of the perceiver, are measurable, consist of wider or narrower perceptual evidence, are aided by speech, and are developed through the process of discovery.

Eisner, E. (1989). Foreword in R. Arnheim, Thoughts on art education. Los Angeles: The Getty Center for Education in the Arts. Introductory essay that provides a concise overview of Arnheim's contributions including the following ideas: that the sensory system is a primary resource in our cognitive life, that perception is a cognitive event, that the eye is part of the mind, and that interpretation and meaning are an indivisible aspect of seeing.

Eisner, E. (1989). Foreword in R. Arnheim, Thoughts on art education. Los Angeles: The Getty Center for Education in the Arts. Introductory essay that provides a concise overview of Arnheim's contributions including the following ideas: that the sensory system is a primary resource in our cognitive life, that perception is a cognitive event, that the eye is part of the mind, and that interpretation and meaning are an indivisible aspect of seeing.


Hurwitz, A. (Ed.) (1994). The arts in their infancy. Baltimore: Center for Art Education, Maryland Institute College of Art. Monograph contains talks and reflections from the conference of the same title. Includes essays by Ellen Winner, Judith Burton, Geraldine Dimondstein, and Patricia Pinciotti, all of which lend credibility and substance to the notion that the roots of the arts are found in the behaviors of infants and young children. A limited number of copies are available from the Center at MICA.

Wilkinson, J. A. (Ed.) (1993). The symbolic dramatic play-literacy connection: Whole brain, whole body, whole learning. Needham Heights, MA: Ginn Press. According to Patterson's 1994 review published in Studies in Art Education (Vol. 36, 1), this book makes the case that the arts are "holistic activities involving an intelligent engagement with life." The roots of literacy are found in dramatic play, and the manner in which professional guidance can foster language acquisition in the early years before schooling is discussed. Symbolic dramatic play is identified as a "first order literacy" and connected to meaning making. Supports the notion that the arts can play an integral part in early childhood development because they integrate "thought with action, form with feeling" (pp.63-64).

RESEARCH

Baker, D. W. (1994). Toward a sensible education: Inquiring into the role of the visual arts in early childhood education. Visual Arts Research 20, (2), 92-104. Reports a study funded by Binney and Smith conducted in the Milwaukee area investigating the nature of art-like activities in day-care centers and nursery schools, recognition of academic and drawing success in schooling, and materials for art activities made available by parents. Study involved 100 preschool 3-year-olds, 50 4-year-olds enrolled in preschools, and 100 public school students in each grade, kindergarten through Grade 3. Methodology involved site visits, inventories, teacher evaluations of student performance, and phone interviews with parents. Findings suggest a strong positive correlation linking involvement with art-like activities and materials, drawing development, and academic success in early childhood.


Eubanks, P. (1995). Art as a visual language in support of verbal language development in young children who are deaf and hard of hearing. Unpublished doctoral dissertation, University of Georgia. DAI, 56, no. 0BA, (1995): 2974. The study focused primarily on practices in two classrooms, second grade and kindergarten, in an oral school for DHH children. Participant observation and key informant interviews were used as data-collection strategies. Research findings, reported as a series of brief narratives, indicate that teachers who serve these children make extensive use of the children’s drawings to develop vocabulary, correct syntax, and check student understanding. These drawings are a pathway into the cognitive life of these children, allowing their teachers to identify incomplete or misunderstood concepts. Though other kinds of visual images were frequently used, works of art were not. When made available, relevant works of art were used to develop vocabulary, increase perceptual awareness, teach concepts, and make complex cognitive and visual connections.

Giles, A. R. W. (2000). “Making special”: Child-centered, meaningful, and artistically authentic early childhood art education. Unpublished dissertation, University of Illinois at Urbana-Champaign. DAI, 61, no. 05A, p. 1715. A qualitative study involving interviews with parents and teachers as well as videotaped observations of children and teachers in a particular kindergarten and first-grade classroom. Factors encourage children to experience “making special,” a term borrowed from Dissanayake and used to describe authentic and artful activities. The effects of “making special” were examined to determine if it is an important part of art education in early childhood.

Greene, J. C. (1981). The acquisition of language concepts by hearing impaired children through selected aspects of an experimental core art curriculum. Studies in Art Education, 22, (2), 32-37. Reports on an experimental and correlational study with kindergarten and Grade 1 pre-linguually deaf children who were engaged with a combination of visual, tactile, and linguistic modes of art activity that resulted in greater concept attainment.

REPORTS FROM PRACTICE


Townley, M. R. (1983, September). Taking another look: Comparing forms. *School Arts* (pp. 48-51). Illustrates ways students can group forms, discuss art, respond to art and visual form through words and action, and use visual forms to express ideas. Examples are taken from Townley’s teaching and her series, *Another Look.* (For a fuller description, see Models for Practice in this entry.)

**MODELS FOR PRACTICE**

- Developing language and literacy through the arts, an early learning program using selected works from the Baltimore Museum of Art. (1997). Towson, MD: Baltimore County Public Schools, Office of Art and Office of Elementary Education and Title I, and the Baltimore Museum of Art. Program originally designed for language-delayed children in early childhood programs that uses specific artworks for in-class study and a museum visit. Activities are language intensive.

Herman, G. N., & Hollingsworth, P. (1992). *Kinetic kaleidoscope: Exploring movement and energy in the visual arts.* Tucson, AZ: Zephyr Press. Presents a vocabulary for describing and acting out movement and energy that has correspondence with the theory of contrasting opposites, i.e., high/low, sudden/sustained, slow/quick, gentle/firm, free/bound, etc. Movement concepts are based on Laban’s language for dance notation. Book illustrates through many examples how movement can be used to respond to visual art forms. As such, it offers a nonverbal form of interaction with and response to art.

Itten, J. (1963). *Design and form: The basic course at the Bauhaus.* Trans. by John Maass. New York: Reinhold. Itten’s curriculum for the basic course, which integrated a number of teaching strategies including the theory of contrasting opposites in the study of visual form, visual analysis of artworks, alternating explorations of materials between two and three dimensions, kinesthetic exercises in preparation for drawing, and opportunities to apply visual concepts to expressive themes and ideas. Illustrated with examples of student work.

Roukes, N. (1988). *Design synectics.* Worcester, MA: Davis Press. Art Director Roukes provides rich language for thinking conceptually about visual form. While he offers a review of the elements of art and principles of organization, he also extends that language to vocabulary drawn from nature and science, thus providing language useful in describing and understanding contemporary art and visual culture.

Townley, M. R. (1978). *Another Look, Levels A, B, and C.* Menlo Park, CA.: Addison Wesley Publishers. A series of lessons designed to develop perceptual awareness and an exploration of visual concepts, themes, and materials in the visual arts. Employs “contrasting opposites” as a developmentally appropriate instructional device for young learners in which one visual concept is understood in relationship to its opposite, i.e., open/closed, straight/curved, smooth/rough, etc. Suggests a developmental instructional sequence in which one or more visual concepts are explored, first in their more simple form and then later in more complex combinations, in preparation for working with themes that can be correlated with the general curriculum while moving between two- and three-dimensional materials. Uses an integrated multisensory approach in which children are guided through looking at visuals and objects, sorting and classification activities, dramatic play, word association, talking about art and artists, and applying concepts with materials and to themes in art. Emphasis on language acquisition, letter recognition, and concept development is at the center of this curriculum. Currently out of print. For more information, contact the Center for Art Education at MICA.
Enriching Art Content Through Reading

**Theory**
While research has yet to confirm that art, by itself, improves reading, it does appear that certain visual skills are directly related to reading and may contribute to reading readiness. Further, it is clear that engaging subject matter, such as art, can motivate learners to read (Burger & Winner, 2000). In the larger sense, reading can be thought of as a process for creating and constructing meaning in and from a variety of forms. Given the human drive to make meaning out of the world of experience, this process constitutes much of what both education and life are about (Eisner, 1978, pp. 14-15).

**Better Practice**
Teachers who incorporate purposeful and appropriate reading into art instruction help develop reading skills while enriching subject matter content in art.

Reading to learn about art can enrich the instructional process. The specialized terminology related to art is a rich opportunity to build vocabulary. Descriptive language, developed through art, can help students master norm-referenced vocabulary commensurate with their grade level. There are strong parallels between visual literacy, critical thinking, and reading: locating the main idea, identifying sequence, locating details, comparing and contrasting, predicting what will happen next, and making connections between cause and effect. In addition, the reading of images and texts requires the development of interpretive skills, making connections with feeling and prior knowledge. Critical skills include discriminating between fact and opinion, reality and fiction; identifying point of view; and articulating reasons for response (O’Brien, 2000). (For more on critical thinking, see Perkins, 1994.)

Beyond words and images, used separately or in conjunction with each other, is the increasing advent of multisensory media wherein one mode of expression “anchors” or qualifies the meaning communicated by other modes of expression (Duncum, 2002). In such an example, sounds or music might change the meaning of an image or an image might be used to qualify the meaning of text. Duncum argues for more than multiple forms of literacy that apply to different forms of expression in isolation from each other. Critical to the construction of meaning in the contemporary world would be a form of multiliteracy that would take into account the interaction of different forms of expression with each other.
Certain study skills related to reading also have their place in the art class. These include following directions, classifying, comparing, note taking, using dictionaries, consulting reference books, and recognizing different genres (poetry, letters, criticism, commentary, and different styles and subject matter in art). In addition, the use of graphic organizers to structure, find relationships, make connections, compare, and analyze helps learners to visually construct meaning from text and image. Scaffolding, or building on prior knowledge, is also a key study skill as is practice with recall of information (O’Brien, 2000). (For more on graphic organizers, see Hamilton, 1998.)

Speed and efficiency, in reading text and/or images, can be practiced by scanning for specific pieces of information and skimming for general information, such as looking for bold print, summaries, and visual information (O’Brien, 2000).

Reading can be supported by more technical approaches that focus on phonics and sounding out words as well as more holistic approaches that use context to help decode words and construct meaning. Reading images might involve similar approaches. Transfer between the two modes of expression is more likely if teachers identify and reinforce the similarities in the processes of reading words and images. A developmental approach is suggested by these strategies tested in practice (Ruopp, 2001):

**Kindergarten to Third Grade**

Drawing, writing, and reading have similar roots in mark-making, storytelling, and the relationship between image and text. A variety of tasks can assist students in becoming reading ready. Practice in identifying letter forms, recognizing words, and sounding out words is an appropriate task. Young students may respond more favorably to symbols and may appear to comprehend them better than words. (See Carroll, 2000, for more information.)

Art curricula that emphasize letter recognition side by side with visual concepts help develop visual discrimination.

Vocabulary and concept development that is approached through a variety of strategies, including touch, movement, sound, sorting and classifying, word association, and practice with art materials, reinforces the process through which meaning is communicated through words, images, movements, and sound. Such strategies are especially helpful for students who are primarily kinesthetic, spatial, and/or visual learners. (See Carroll, 2000, for more information.)

**Grades 4-8**

Reading for comprehension becomes a central task in these years. Thus, selected readings relevant to vocabulary development, directions, and supplemental information about artists are appropriate to incorporate into art instruction.

Teachers who read important information or text while students silently read along find this to be more successful than having a student read the same information out loud.

Silent reading is best done in short segments. Dividing readings among table groups and generating answers to guiding questions, reported to the class, make up an excellent strategy for gathering a lot of information from reading in a short period of time. (See Ruopp, 1996, for a unit involving this reading strategy.)

Enabling students to read image and text for interest, pleasure, information, and appreciation is the larger goal of both visual and verbal literacy. The functions of reading within the content area of art include:

**Reading to Perform a Task**

In Grades K-2, students read illustrations or diagrams to follow directions, read labels in sorting and categorizing, and read single words identified as key vocabulary related to tasks they will perform. Teaching visuals should be simple and highly visual in nature.

In Grades 3-5, students read materials that explain a process or to follow simple step-by-step directions. Diagrams and images that support the text are useful. Teaching visuals can be more complex.

In Grades 6-8, teaching visuals can emphasize vocabulary and definitions as well as steps in a process. Rubrics, distributed at the beginning of projects, clearly set expectations for task performance and learning. Discussion, in which the teacher checks for understanding, reinforces both reading skills and the meaning of expectations.

**Reading to Be Informed**

In Grades K-2, children are building a vocabulary of visual symbols as well as words and concepts. Exploring concepts embedded in concrete form and experienced through touch, sight, hearing, or movement can help develop a vocabulary for describing and understanding their world of experience.
In Grades 3-5, students can read about art from selections that are age appropriate. Key words should be highlighted and discussed. Students can be asked to identify something they did not already know but learned from the reading. Asking students to consider what they need to know prior to reading can focus their search for information.

Process-centered projects that require students to evaluate themselves after each step invite them to think about what their next step will be and what they need to know to get there. They can come to some conclusions by visually reading the progress of their projects. When they realize they need to gather additional information from text sources to continue, they know what they are looking to find out—whether they gather it through their own reading or from being read to by the teacher.

In Grades 6-8, students need to gather materials and ideas from different sources, including text and print resources. Reading, summarizing, combing through materials, and using information are integral to the process of formulating their own thoughts, reactions, and ideas for art.

**Reading for Literary Experience**

From K-8, narrative projects that move to and from the written word bring reading, writing, and visual storytelling into a close relationship (Olson, 1992). Artwork can be inspired by stories, fairy tales, myths, legends, poems, and other literary forms.

Likewise, artwork can generate written text. Image and text can work together. Propositions such as “What happens next?” and “What would you do if it were you?” are examples of prompts for visual responses to visual and verbal imagery. (See Olson, 1992, for specific examples.)

Illustrating text, translating the verbal into the visual, is another way of having students attend to the meanings embedded in text, looking for visual cues about setting, weather, time of day, environment, characters, action, and props that might make for illustrations depicting the progress of a story. (See Wolf, 1999, for an example.)

Transfer between the two modes of expression is more likely if teachers identify and reinforce the similarities in the processes of reading words and images.
REFERENCES


College text designed for teachers in all content areas. Includes chapters that define content literacy and ways of thinking about the reading process, present issues related to diversity and culture, provide guidelines for planning instruction and assessment, and suggest ways to make reading an effective component of all content areas.

Duncum, P. (2002). Visual culture: Multimodality and meaning. Presentation at the National Art Education Conference, Miami Beach, FL. Duncum argued for art educators to rethink an exclusive focus on things visual and consider how different modalities interact with each other. He argued for multiliteracy as a poststructural construct in which any text has multiple readings and noted that literacy is being reconceptualized as a social phenomenon. More than just decoding and encoding, it is a highly dynamic social practice, changing over time and profoundly political.

Eisner, E. W. (Ed.) (1978). Reading, the arts, and the creation of meaning. Reston, VA: National Art Education Association. Includes papers presented at a symposium exploring the topic from a variety of viewpoints such as Kenneth Marantz’s argument to consider illustrated children’s books works of art and Edmund Burke Feldman’s thoughts on art, criticism, and reading.


RESEARCH

Burger, K., & Winner, E. (2000). Visual arts and reading. Journal of Aesthetic Education, 34 (3-4), 277-293. A critique of existing research investigating the relationship between the visual arts and reading. Suggests more about what has not been examined through research than actual insights but does conclude that the visual arts may contribute to reading readiness and that the arts are one of many vehicles that can motivate learners to read because of their engaging nature.

Carroll, K. L. (2000). Report on the Goals 2000 Grant: Developing Reading and Writing Readiness through the Visual Arts. Unpublished report prepared for the Maryland State Department of Education. Reports that reading readiness at the kindergarten level is supported by increased time in art with a curriculum modeled after the Another Look series developed by Mary Ross Townley in 1979. This curriculum uses a language of contrasting visual concepts that are explored through multiple modes of experience (touch, sight, sound, classifying, movement, word play, and with both two-dimensional and three-dimensional materials). The curriculum builds certain visual concepts and then applies them to themes drawn from the larger curriculum.

REPORTS FROM PRACTICE


MODELS FOR PRACTICE


Olson, J. (1992). Envisioning writing: Toward the integration of drawing and writing. Portsmouth, NH: Heinemann Press. Contains numerous strategies for generating visual narratives, some based on literary texts and musical source material. Well illustrated with examples of student work. Includes a discussion of the relationship between visual and verbal forms of expression as well as a section of visual learners who struggle with the language arts.


Suggests a number of practical strategies such as using an art interest inventory and starting with images that are of interest to learners, drawing on children’s books that are artistically illustrated, and increasing vocabulary while studying art. A model is provided for developing comprehension skills through art appreciation that motivates, possibly through guiding questions, and allows time for initial reactions, presents new vocabulary and concepts, involves directed viewing, and concludes with follow-up activities.


Wolf, B. (1999, December). Visualizing text: Illustrating a class book. School Arts, 15-19. Illustrates how seventh-grade students took on the task of making a class book illustrating The Call of the Wild, which they were reading in language arts. Every student was assigned an excerpted passage so that the entire book could be illustrated. Students grew in their drawing skills, and their understanding of the book developed by having to visualize and represent characters, settings, action, and plot developments described in words.
Creating a Mutually Supportive Relationship Between Art and Writing

**Theory**

While more attention has been given to reading in the content area, writing across the curriculum has its own advocates, issues, questions, and challenges. A developmental view of writing begins with the observation that drawing and writing have the same roots and develop side by side in early childhood (Baker, 1985; Yanin, 1985; Edmonds, 2002). The child’s discovery that marks can carry meaning, be they letters, numbers, or figures, provides the conceptual basis for all symbolic languages including mathematics, writing, and drawing. Further, it appears that the development of fine motor skills in mark making equally funds both the early drawing and letter-writing efforts of young children. The degree to which the child has developed control with mark making and a repertoire of marks and shapes is likely to consistently show itself in early efforts to draw both schemata and letters (Carroll, 2000). One might conclude that, at least at the early stages of schooling (preschool, kindergarten, Grade 1), practice in drawing contributes to both drawing and writing readiness.

At a second level, image making can take up another role in the development of writing. Strong parallels exist between visual and verbal forms of narrative. Common to both are characters; settings; props; stories with beginnings, middles, and ends; sequence; cause and effect; conflict and resolution. Reports from practice suggest that nurturing both visual and verbal forms of expression, continuing that original reciprocal relationship, results in gains in both modes of expression (Olson, 1987; Carroll, 1996; Ernst, 1993; Hubbard & Ernst, 1996). Thus, combining and/or alternating between text and image throughout the K-12 curriculum surfaces as a significant instructional strategy (Fountas & Olson, 1996). In particular, some have noted the manner in which such a strategy serves students who are primarily visual learners and others who are challenged academically (Olson, 1992; Thacker, 1996).
While drawing may provide a visual and alternative way to plan or rehearse for writing (Calkins, 1986; Caldwell & Moore, 1991), writing can also serve as a way of planning or preparing to make art (Galvin, 1997). Information can be gathered about students through inventories or surveys, and questions can be constructed to help students identify their own interests, experiences, beliefs, and assumptions (Ayres, 1998). Ideas can be generated through mapping, diagramming, brainstorming, recall, and reflection (Hamilton, 1998). Mastery of vocabulary and attention to steps in various processes, as well as synthesizing findings from readings or research, can be supported through regular writing practice (O’Brien, 1992).

Critical and reflective writing also harnesses writing in the service of learning and thinking about art (Susi, 1999). Writing develops through practice with vocabulary, description, and analysis; raising and responding to guiding questions; making connections; and revisiting processes, thoughts, feelings, and responses. Assessment of art learning may also benefit from discussions (Hafeli, 2001) and written reflections. Often, reflective writing can reveal as much (or more) about what has been learned in the process of making art as can be gathered from what is seen in the product.

Becoming a good writer in any discipline requires practice. The development of writing is closely connected with the development of thinking. Important to writing are the form, the message, and the intended audience. Writers often envision the reader and attend to the purpose of the act. Different forms may serve different purposes. For example, a poem or a letter may provide a reflective structure for responding to a work of art or for sharing personal insights and discoveries. A journal entry, recording goals and/or accomplishments for the day or week, may take one of many forms depending on what needs to be recorded. Reporting on an artist, comparing works of art, summarizing readings, or writing essay responses on examinations may require a more academic form of written response (Barnet, 2000). Developing an artist’s statement is a particular kind of writing task. Critical writing about art also has its own demands (Barrett, 2000). In all cases, examples of good writing can play an important role. (See entries under Outcome IV for more on modeling for critical writing.)

Writing is also rewriting (Barnet, 2000). Rewriting, as a second step, is an issue of craft and another opportunity for learning. Writing requires attention to technical issues such as spelling and
grammar as well as a more holistic concern for personal voice, ownership of content and style, and the development of ideas. As with reading, writing can be thought of as a process for the construction of meaning in which both form and content matter.

Writing into art, that is, making text part or all of an image, is yet another form writing takes in the world of contemporary art. Text can complement, enhance, extend, or qualify the meaning of an image, take the form of response or commentary, or operate as an element within the work playing dominant or minor roles providing juxtaposition, contrast, or humor. Image and text may be presented by the artist or be generated from participants and viewers. In this sense, text and image play with and against each other, a reminder that they once began side by side.

Encouraging movement among modes of thought and expression should help ideas grow and develop. In the process, students should come to know more about how they learn and think.

While art teachers recognize as part of their mission the identification of students who are highly able in making art, Hurwitz (1983) suggests that art teachers should also be on the lookout for those who demonstrate high sensitivity in critical performance. The development of critical response, and the integration of writing into the art curriculum, will help these students stand out.
INTEGRATING WRITING INTO THE ART CURRICULUM CAN SERVE MANY ENDS. IN GENERAL, THE FUNCTIONS OF WRITING WITHIN THE CONTENT AREA OF ART INCLUDE WRITING TO RECORD STEPS IN A TASK; WRITING TO OWN INFORMATION AND DEVELOP IDEAS; AND WRITING FOR INSIGHT, UNDERSTANDING, AND APPRECIATION. ON ANOTHER LEVEL, WRITING AND MAKING ART SHOULD FEED EACH OTHER. ENCOURAGING MOVEMENT AMONG MODES OF THOUGHT AND EXPRESSION SHOULD HELP IDEAS GROW AND DEVELOP. IN THE PROCESS, STUDENTS SHOULD COME TO KNOW MORE ABOUT HOW THEY LEARN AND THINK.

RECOMMENDED STRATEGIES

Note: Some of these strategies emerge from the literature; others, not yet reported in the literature yet observed as effective in practice, are reported here.

Kindergarten to Third Grade

Emerging literacy can be supported by the interplay of the disciplines of reading, writing, and art (Ernst, 1992).

Opportunities for young children to generate stories related to their images can be integrated into lessons and practice sessions. Pre-writers can dictate stories stimulated by their artwork and copy from an adult-written version as they practice writing their own words. Narrative formats and especially book forms provide opportunities to write stories. A fill-in-the-blank story, for early writers, provides a structure with, at the same time, an opportunity to enter creative and original ideas into a basic story line. Stories drafted in relation to narrative imagery can be corrected and rewritten so that text, which functions as part of an image or as a companion piece, demonstrates proper spelling and sentence structure.

Writing can be used to generate ideas for making art. The use of visual organizers and generating lists through brainstorming can be modeled with a class.

Matching games with words and images, which check for comprehension, can give students practice in writing art words.

Grades 4-8

A variety of written tasks, selected for their appropriateness, can help generate ideas, record information from readings, plan, give peer feedback, and offer opportunities to reflect on encounters with art. Such examples include drills, peer-feedback forms, and self-assessments.

Have students make and use journals that accommodate both drawing and writing to provide opportunities for students to consider their own thoughts (Carroll, 1996).

Students can generate signage and text to accompany their own individual work and/or class exhibits of their artwork.

Collaboration with colleagues in the identification of themes or concepts can make connections between writing in the other content areas and art. For example, students might write a story, poem, report on a scientific study, an account of a historical event, or another piece that could then be used as the basis for image making. Exemplars or student artwork might be used as the prompt for creative, descriptive, or interpretive writing.

Grades 9-12

Written assignments can be integrated into high school art courses. Guiding questions can help focus attention.

Examination of good models of critical writing helps students understand what constitutes good writing about art.

Practice comparing and analyzing works, as well as writing research papers, is particularly relevant to courses in art history and Advanced Placement in art.

Time taken in giving feedback on both form and content in writing, while working from drafts to produce a polished piece of writing, helps develop the depth of comprehension as well as skill in writing. Good polished works can then be shared through publications and exhibitions.

Concrete tasks such as preparing text and materials to accompany an exhibit can motivate students, sharpen skills, and maximize learning.
REFERENCES


Edmonds, S. J. (2002). Every story tells a picture: The co-construction of meaning and conclusion that the forms naturally entwine, each informing the other, resulting in fuller and more complete meaning.


BETTER VISUAL ARTS EDUCATION

RESEARCH


Yanin, V. (1985, March). The drawings of Onfim. School Arts, (pp. 6-8).


In a study conducted with 111 kindergarten children, a control group and an experimental group featured two different kinds of teacher modeling in a series of seven lessons once a week. In the experimental group, the teacher modeled drawing a picture in her journal before writing; the control group model did not use a drawing. Findings suggest that initially the drawing strategy correlated with higher numbers of words written, but after the third lesson, students tended to rely less on the pictures and more on their own writing.


REPORTS FROM PRACTICE


Ernst tells how, as a former middle-school English teacher (also certified in art), she integrated reading and writing into an elementary art program. Her approach includes literature and writing, student choice and collaboration, portfolio as a means of assessment, and exhibition. The book is richly illustrated with drawings and writings by students.

Hafeli, M. (2001). Encountering student learning. Art Education, 54 (6), 19-24. As an observer, Hafeli culs the reflective comments of an eighth-grade class debriefing on self-portrait drawings. She identifies six major insights about drawing that emerged from conversations with and among students, supporting the notion that art learning is more than just appears in the product.
where they left off with drawing in childhood. Through case studies and reports, this book provides evidence that visual expression is a human capacity possessed by everyone. The volume offers effective ways to integrate drawing into math, science, and language arts curriculum. Student range from elementary students to high school special education students and adult learners. Illustrations of drawings and writing samples are included.

Olson reports that students who are visual learners often get stuck in their writing. Given the opportunity to draw first, then discuss and subsequently return to their writing, such students show marked improvement in their writing. Pre and post samples indicate that the process of drawing and talking about the image produces written work that is richer in detail, loaded with more feeling, and freer from error.

Thacker reports on his own discovery of drawing and the role drawing and visual imagery can play in helping unearth personal stories in writings by high school students, many of whom are ESL. Makes special note of how much learning to draw changed him as a teacher.

**MODELS FOR PRACTICE**

As a pre-instructional strategy, Ayres uses a survey with her middle school students to generate data concerning their interests in drawing, their beliefs about what it takes to be able to draw, and their drawing goals. The data is used to address myths and motivate students to try new drawing strategies related to observational drawing.

Text on the teaching of writing that endorses drawing as a form of rehearsal for writing, especially for those who have found writing difficult for many years.

Lists a number of writing activities applicable for Grades K-12.

Report on a ninth grade in which memories connected with smell served to generate ideas and reflective writing was used to develop them. “WSS” directions guided the writing (keep it simple and short). The resulting artwork integrated text with the image to reflect memories of highly personal experiences and relationships.

Defines an artistic strategy as a combination of seeing and doing. Provides visual strategies for gathering ideas and planning, observing and recording, and reflecting and assessing.

Program guide presenting background and strategies for implementation.

Olson introduces the problem of visual or verbal learners and offers a model for an art education program that emphasizes narrative drawing. Book includes sections of the language arts-program, the special-education program, and theoretical implications for visual and verbal learners. The book is well illustrated with examples of drawings by her students.

Discusses the value of reflective writing in reconstructing, analyzing, and evaluating what happened after the fact. Lists categories of reflective questions and examples of questions that cause students to elaborate on their responses. Includes suggestions for evaluating and responding to reflective writings.
The theory

Research has not as yet revealed how to predict who will become an artist. Perhaps this is because being an artist has only partially to do with natural or even developed abilities. Some suggest the most salient predictor is a “burning desire to work in the arts” (Clark, 1991, p. 63). Yet becoming an artist may have as much to do with personal needs for visual forms of thought and expression that arise out of life’s circumstances as it does with ability. So why should art teachers be concerned about serving highly able students? The answer lies in evidence suggesting that many students at all levels of the K-12 spectrum want, require, and deserve a differentiated program in the visual arts (Hurwitz, 1983; Clark & Zimmerman, 1984).

Research shows that it is possible to successfully identify students who are ready for, and will do well in, a differentiated program of instruction (Clark, 1991; Clark & Wilson, 1991). The obvious place to begin is in thinking about who those students might be and how they might be identified.

Better practice

Teachers who are informed about variations in the ways high ability in the visual arts manifests itself can help identify those who would benefit from differentiated instruction.

Highly able students in the visual arts include those who are developmentally advanced in their expressive and/or critical skills and who express a hunger to know more, do more, accomplish more, and immerse themselves further in the study of art (Carroll, 1994; Clark, 1991; Golomb, 1992, 1995; Hurwitz, 1983; Pariser, 1988). Often these students are aware of their own talents, recount positive experiences in making art, and report they find pleasure in devoting a lot of time and energy to their art (Clark & Zimmerman, 1991). Not so obvious is another possibility: that those who demonstrate high ability in the academics may be fast learners when offered the opportunity to study art and may find the visual arts an area in which they can excel and which they want to embrace (Carroll, 1987). Some students report that “they decided to study the visual arts because it interested them although they could have studied other subjects as well” (Clark & Zimmerman, 1991, p. 63). Yet another possibility exists: that many young people do not know enough about their abilities in the visual arts, or about art itself, to have a sense of either their own potential or the potential that art might have to serve their expressive needs.

Theory, research, and reports from practice suggest several ways highly able students in the visual arts may be alike and different. For example:
Clark and Zimmerman (1991) conducted a survey in which artistically talented students self-reported themselves to be “very good in academic subjects and talented in many other areas than the visual arts” (p. 63).

Some highly able students are spatial thinkers and kinesthetic thinkers. They may exhibit ability with three-dimensional form, have an innate feel for materials, and/or demonstrate an interest in taking things apart and putting them back together again. These abilities may or may not correlate with high ability in two-dimensional tasks such as observational drawing, high performance on academic tests, or indeed, success in an academic environment (Dixon, 1983).

Highly able students drawn to photography or computer graphics may be similarly uncomfortable with observational drawing. On the other hand, those comfortable with two-dimensional forms of representation may perform well with three-dimensional materials (Clark & Wilson, 1991), although they might not.

Highly able students may demonstrate specific aesthetic sensibilities or preferences for media, style, subject matter, or themes early on in their development (Carroll, 1994; Kay, 1999a; Pariser, 1985; Zurmuehlen, 1991).

Kay (1999a) suggests that “high technical proficiency may be necessary but is insufficient for talent development” and directs attention to affective qualities such as emotional engagement, aesthetic sensibility, and problem-finding ability (p. 381).

Some highly able students may not see themselves so much as “gifted or talented” but simply as “different” (Gaither, in progress).

In some cases, students’ abilities may not be obvious from artwork done in school. For example, there are reports of students for whom art is a serious endeavor absorbing much of their free time who perform only at the level of their peers in response to school art tasks, particularly if they find them limiting (Wilson, 1974; Wilson & Wilson, 1980; Kay, in progress). Thus school art, especially that which does not leave room for individual choices or is confined by short work periods, may not reveal avid interests in art or even advanced abilities.

Developmental student profiles that record abilities and achievements, in and outside of school, can assist all members of an educational community in recognizing gifts and talents of individual students. It may also provide a basis for differentiating the curriculum in ways that will serve the special needs of those with high ability (Kay, 1999b, 1999c).
**PRACTICE**

Given such challenges, identification of highly able and arts-motivated students poses some interesting challenges. Some basic guidelines follow:

1. Design basic art instruction for all students to be sufficiently varied in media and form; develop rich opportunities to build skills and find meaning through making art and responding to art.
2. Include opportunities to work with both two- and three-dimensional materials, different forms of representation such as narrative, observational, symbolic, and metamorphic; engage learners in different kinds of problem solving and provide room for personal choices (Carroll, 1987).
3. Solicit work done at home and inquire about art-related interests and achievements outside of school (Kay, 1999; Wilson, 1974; Wilson & Wilson, 1980).
4. Invite students to bring in work done at home and make a special place for its display. Use surveys to gather information from students on their interests as well as how they perceive their abilities. Ask questions: What opportunities do you have for drawing, making things, or doing art outside of school? How much time do you spend on your art? Is this interest shared with other family members and, if so, with whom? Have you taken special classes outside of school? Have you ever received special recognition for achievements in art or other areas?
5. Use multiple criteria in the identification of highly able students (Hurwitz, 1983; Clark & Zimmerman, 1991; Clark & Wilson, 1991).

Common strategies include self-nomination, interviews, letters of reference, auditions in which students are engaged in specific art problems, portfolios (where students have had sufficient instruction from which to create a body of presentable work), and testing.

Develop student profiles that record different kinds of abilities and achievements in the visual arts as well as multiple interests in different art forms and/or academic disciplines (Kay, 1999).

Within the visual arts, students may exhibit differences of ability related to two-dimensional expression, three-dimensional expression, a feel for materials, creative problem solving, and aesthetic response. They may also have abilities related to the performing arts and/or academic strengths.

Become an advocate for those who express high interest and/or demonstrate unusual ability.

Share information with colleagues who may not have noticed students’ special interests or abilities related to the visual arts. Talk to the students’ parents.

Participate in the development of services that address these special needs (Clark & Zimmerman, 1984, 1986, 1995; Hurwitz, 1983).

Inventory options, inside and beyond school, that might serve the needs of high-ability students. At the elementary or middle school level, highly able learners may require differentiated instruction within or beyond the regular art curriculum. At the secondary level, a good comprehensive program can lead to advanced courses or specialized programs whereby a differentiated curriculum can be made available to highly able students seeking both the opportunity and the challenge. Local museums, colleges, and other organizations outside school may also have opportunities highly able students can access.

**REFERENCES**

Carroll, K. L. (1998). Cultivating artistic behaviors. In Simpson et al., Creating meaning through art. Upper Saddle River, NJ: Merrill, Prentice-Hall (pp. 75-114). Chapter explores how art can be thought of as behavior. Illustrations and examples show how instruction can facilitate exploration of visual and spatial form and material, development of symbolic language, and expression of thoughts, feelings, and ideas through art.


Clark, G., & Zimmerman, E. (1986). A framework for educating artistically tal-
A comprehensive review of theory and research related to the course of children’s graphic development from the view of a psychologist of art. Includes illustrated examples of typical graphic developments, results from specific studies, and case studies of four gifted child artists.


**Research**


A comparison of beliefs, values, and strategies regarding the visual arts in gifted education and the gifted in art education. Concludes that the fields of gifted education and art education operate on very different conceptions of giftedness yet have the potential of informing each other given more dialogue.

Carroll, K. L. (1994). *Artistic Beginnings: The work of young Edvard Munch*. *Studies in Art Education* 36 (1), 7-17. An analysis of the collection at the Munch Museum in Oslo including work by the artist, his mother, aunt, and siblings. Identifies simultaneous efforts between ages 11 and 21 to master narrative conventions and observational techniques, work from master works, and incorporate visual material from popular culture.

Clark, G., & Wilson, T. (1991). *Screening and identifying gifted/talented students in the visual arts with Clark’s drawing abilities test*. *Roeper Review*, 13 (2), 92-96. Reports on a study evaluating the correspondence of Clark’s drawing test with performance in a summer program for high school students. Includes a description of the four items used in the test (all from memory and imagination) and criteria for scoring the drawings. Includes data from original study in 1984 and replications in subsequent years validating significant correspondence of performance on drawing tasks with performance in two-dimensional courses as well as three-dimensional and more kinesthetic experiences.

Clark, G., & Zimmerman, E. (1995). *Programming Opportunities for Students Gifted and Talented in the Visual Arts*. *Translations: From Theory to Practice*, 5 (1). Reston, VA: National Art Education Association. In this edition of *Translations*, Clark and Zimmerman offer a review of the research on programming opportunities. They conclude that ability grouping, however that is accomplished, appears to be the more effective choice for providing special services to those with high ability in the visual arts. They identify several ways in which ability grouping can be achieved—options that range from pull-out programs to full-scale residential schools focused on the arts. Includes recommendations and an extensive bibliography of references.


**Reports from Practice**

Gaither, J. (in progress). A developmental case study: From “not talented just different” in high school to professional artist. *Journal of Secondary Gifted Education*. Describes a personal course of artistic development as reflected upon by a highly able student who became a professional artist. Her reflections are set into context by her high school art teacher.


Zimmerman, E., & Clark, G. (1991). What we learned about artistically talented students from the Indiana University (IU) summer arts institute: What experiences should we be providing students displaying high artistic ability in the visual arts? *Roeper Review, 13*(2), 63-64. Session I synopsis from the 1989 Indiana Symposium. Includes identification of three studies conducted by the authors and their students plus background information on the topic of identification of the highly able in the visual arts and responses by participants.

**Models for Practice**


London, P. (2000). Workshop for Teachers, Maryland Institute College of Art. In his teaching, London uses a number of strategies specifically employed to empower the student to make choices that range from selecting and setting up a personal work area and preferences for media, format, and scale of work to indicating preferences for feedback on work.
Shaping Learning Experiences for Highly Able Students

Theory
Although developmentally advanced and highly able students often appear to be self-directed and self-motivated, it cannot be assumed that they can function on their own. They need and deserve the benefit of strong support, good instruction, and an environment that nurtures and challenges their abilities and interests.

Practice
Kanevsky (2001) reported the findings of a master’s thesis conducted under her advisement (Keigley, 1996). Students were asked to identify factors seen as contributing to academic achievement. In the initial analysis, Keigley found four factors and Kanevsky helped identify a fifth. All begin with Cs: Care, Challenge, Choice, Control, and Complexity. Research conducted by art educators and reports from practice in the visual arts validate these findings yet suggest that these five initial Cs could be expanded to include three more “Cs”: Critical Feedback, Community, and Continuity. The list that follows translates each qualifier into terms meaningful to art educators and references research findings.

Care
“Teaching is about relating to people,” says one artist who sees the responsibility as larger than just teaching about art. “Teachers are responsible for helping students learn both about themselves and their artwork” (Zimmerman, 1991, p. 77). Further, it seems that teachers who care deeply about their students, who empathize with the struggle, practice, and hard work involved in developing artistic skill and behaviors, develop a repertoire of strategies including humor, encouragement, praise, and storytelling to use in their teaching (p. 78). In addition, they are likely to have well-developed diplomatic skills for coaching students (Carr, 1991).

Sometimes, care is expressed in terms of faith in a personal journey made possible by the art, acknowledging that the search for meaningful imagery is one that requires patience, dialogue, encouragement, support, time, and reflection (Johnson, 2001).

Care is also very visible in the level of support invested in students’ development. Making connections, finding resources, searching for opportunities, coaching students, talking to parents—all take time and energy, often beyond the normal class schedule. Yet they can make a tremendous difference in a student’s life. For example, acting on a sense that exposure to certain art will help students find solutions to their own visual problems is important (Gaither, in progress). Attending to larger goals, such as help in entering competitions as well as developing and documenting portfolios, represents another example of the care highly able students seek. Others include...
making connections with opportunities outside of school such as Saturday classes, summer programs, night classes at community colleges, portfolio days, and scholarship opportunities. Welcome as well are efforts to bring in speakers who can inform students about program opportunities at the next level, careers in the visual arts, and the expectations of colleges and art schools.

Good care may also take the form of finding an appropriate balance between hard work and joy. While it takes a high level of investment for students to discover the joy in work, too much pressure to perform and produce can have the opposite effect of sacrificing the joy to be found in making art.

**Challenge**

Highly able students want teachers who are knowledgeable about art skills and concepts. They value teachers who will pass on secrets of the trade, introduce them to systems and best practices, provide direct instruction, and demonstrate how to approach representational and technical problems (Zimmerman, 1991).

Using elegant problems that call for higher-level thinking, while leaving room for personal meaning, is another way to challenge students (Kay, 1998). These open-ended problems challenge students to be elaborators of both ideas and form and to be fluent in the generation of ideas, flexible in their thinking, original in developing solutions, and personally responsible for making meaningful choices.

Challenging students to find out more about art and to examine their assumptions can be accomplished through research requirements, exposure to current literature and contemporary forms of art, outside experiences such as attending lectures and exhibitions, and class time devoted to discussion and critique (McDaniel, in progress).

As an artist working with concepts of the mind and familiar with the notion that challenging work produces endorphins in the brain that bring a sense of well-being, one artist put “challenge” into a new light. His primary curricular goal for highly able students in the media arts reflected this idea: “I want students to know adults do mentally challenging things because it makes them feel good” (Boort, 1995).

**Choice**

Research suggests that highly able students often identify with particular art media and/or subject matter. Further, they enjoy taking responsibility for the content of their work (Zurmuehlen, 1991). They may also have developed, at a relatively young age, their own aesthetic sensibilities and/or preferences (Kay, 1999). Thus giving permission to make artistic choices may prevent frustration and result in work that will have continuity with work made previously or become a transition to new developments.

Finding a personal voice is another dimension of choice that can be facilitated through elegant problems and opportunities to set (or find) one’s own problems (Kay, 1998). Carr (1991) suggests that developing creativity “involves helping students become aware of unconsciously held beliefs and expectations and leading them from stereotypical or borrowed thinking to what is truly personal and meaningful” (p. 70).

**Control**

Having a sense of control over their education and development is vitally important to highly able students. Teachers can promote student control by inviting them to help shape the course of events, encouraging them to set their own goals and problems, and asking them to set the criteria against which they want their work assessed (Gaither, in progress). These steps also foster responsibility and accountability.

**Complexity**

Research suggests that artistic development often moves forward on multiple tracks simultaneously. For example, Munch pursued multiple avenues of expression during his adolescence: visual narratives, observational drawing, studies from master works of art, and adapting imagery from popular sources. Each of these avenues involved a self-structured path of disciplined practice with challenges that increased as he gained mastery of skills and techniques. This repertoire provided the foundation for a lifetime of work (Carroll, 1994). Others, including Picasso and Toulouse-Lautrec, have pursued

They need and deserve the benefit of strong support, good instruction, and an environment that nurtures and challenges their abilities and interests.
Highly able students want teachers who are knowledgeable about art skills and concepts. They value teachers who will pass on secrets of the trade, introduce them to systems and best practices, provide direct instruction, and demonstrate how to approach representational and technical problems.

A very structured approach to the development of foundation skills and techniques (Carroll, 2001). An additional study suggests that at times during the course of artistic development expanding a knowledge base causes personal aesthetic preferences and creativity to take a back seat to the development of skills or techniques (Kay, 2000).

A developmental curriculum designed specifically for the highly able can be structured similarly to that of art colleges, moving from foundation skills toward personal expression. For example, visibly significant leaps appear in student examples illustrating assignments, problems, and products in the drawing curriculum at the Carver High School for Arts and Technology where drawing has been integrated in all media explorations including photography and sculpture (Carroll & Gaither, 2000, 2001). The Advanced Placement exams and the International Baccalaureate programs present models for structuring curricula that move from basic skills and concepts progressively to more sophisticated ones (Tomhave, in progress). All of these suggest ways that a curriculum can move from structure to freedom.

Context is another way of thinking about complexity. Highly able students want to know the reasoning behind certain practices. For example, explaining concepts and ideas related to different practices can set drawing instruction into context (Root-Bernstein et al., 1991). In reflecting on successful teachers he has had, Carr (1991) suggests that teachers who present “a context and a direction for the response of the unformed visual desires of their talented young students (widen the) context of art that successfully generates further inquiry into art.” Otherwise, he notes, the work would stay “amateurish, naïve, provincial, or stereotypic instead of work that encompasses or generates a new context” (p. 71).

**Critical Feedback**

Research (Zimmerman, 1991) and reports from practice (Gaither, in progress; McDaniel, in progress) suggest that teachers of the highly able devote almost half of their instructional time to critical feedback and dialogue. The majority of this feedback may take the form of brief personal consultations. Such teachers often begin with the positive and/or ask questions before they offer suggestions on how to improve the work or offer a demonstration (Zimmerman, 1991, p. 79). As well, timing, phrasing, and message are all important as teachers who have gone back into the studio through an MFA program report; returning to the role of “student artist” made them rethink how language can be used to provide constructive criticism (Carroll, 1996).

Critical dialogue can take many forms. Useful strategies
engage the group actively in critical discussion. Dialogue early or midway in the process can focus on goals and processes of the artist whereas response to a finished work might focus on the work. Teachers may ask students what kind of feedback they are seeking and how they might like to engage in that dialogue. For example, students may want to tell the “story” of how a work evolved or they might prefer to have the work “read” back to them as a way of understanding how and what it communicates (London, 2000). Guest critics can also supplement the critical feedback students desire.

**Community**

Developing a community supportive to creative work requires spaces, facilities, resources, and strategies that will cause the group members to bond with each other. Ability grouping, by its very nature, puts students into contact with others like themselves, but it takes more than mere grouping to achieve a sense of community with an identity and shared values. McDaniel (in progress) reports that a coffeepot, sofa, and regular group critiques helped promote a sense of community in her art program while individual studio areas encouraged students to develop independent bodies of work. The coffeepot made students feel like adults and artists. With a place furnished for discussion and dialogue, students were able to gather together socially to discuss work and engage in regular critiques.

The feeling of community was reinforced by display spaces where group members could see the ongoing work of peers. Group exhibitions gave the community visibility and identity while one- and two-person shows gave individuals a goal to target and further enhanced the community’s credibility.

Group participation in special events such as trips to museums, gallery openings, and lectures in the community provided a social dimension to the group while stimulating creative ideas. McDaniel concludes that a sense of community takes time, sometimes years, to develop. Students begin to sense that they belong to a group that not only shares specific values and interests but affirms them in the process. Other reports affirm the importance of spaces and facilities and time devoted to developing community and critical dialogue (Root-Bernstein et al., 1991; Zimmerman, 1991; Zurmuehlen, 1991).

**Continuity**

In addition to a good curriculum, Zimmerman (1995) notes, intensive and prolonged instruction plays a critical role in artistic development. Schedules that create longer class periods or blocks of concentrated time are strongly recommended (Zurmuehlen, 1991). Longer uninterrupted periods for studio work can also be created through art nights, after-school hours, and “in-school field trips” where a day can be devoted to art. Options such as Saturday painting trips, bus trips to museums and artists’ studios, Saturday classes, and summer gatherings or programs present alternative ways to create intensive work experiences within a calendar year. Continuity of instruction over the course of years offers even greater support for artistic development.
REFERENCES


Kay, S. I. (1998). Shaping elegant problems for visual thinking. In Simpson et al., Creating meaning through art (pp. 260-288). Upper Saddle River, NJ: Merrill, Prentice-Hall. Chapter reviews creativity research and theory and introduces the characteristics of an elegant problem. Text mentions sufficient flexibility for learners of all levels of ability to engage with the problem, the possibilities of generating lots of ideas, and opportunities for original thinking and elaboration, as well as intrinsic value and worth in doing.


Research


Jones, M. A. (1995). A retrospective student evaluation of a gifted and talented visual arts program. Unpublished dissertation, University of Missouri-Columbia. DA# 9705352. Data base containing a survey of 50 alumni of a GT visual arts program. Findings suggest that students saw studio experiences as most important, art history as beneficial, and art criticism and aesthetics as moderately beneficial. Being in a program with talented peers prepared them well and enhanced their artistic development and current success. They appreciated faculty dedication and willingness to recognize advanced students as fellow artists, not just students.


Tomhave, R. (1999). Portfolio assessment in the visual arts: A comparison of advanced secondary art education strategies (Advanced Placement, International Baccalaureate, Secondary Education). Unpublished doctoral dissertation, University of Minnesota. DAI, 60, no. 06A (1999). P. 1870. One group (the control group) received the Advanced Placement Studio Art course of study while another (the experimental group) received the International Baccalaureate Art/Design course of study. The scores resulting from these external evaluations as well as longitudinal data collected during the course of the 1997-1998 school year were examined and analyzed in order to compare the two instructional methods. The time students in the experimental group spent practicing oral and written presentation skills, researching artists and their works throughout history, critiquing their own work as well as the work of others, and grappling with aesthetic issues did not diminish the quality and quantity of the work in their portfolios as assessed by Advanced Placement examiners.


Case study of the author’s son analyzing the impact of in-school and out-of-school educational opportunities.

Reports findings from a survey conducted with 20 high school students attending a summer program. It includes information about early art experiences, identification with media, subject matter choices, environmental influences, and recommendations.

REPORTS FROM PRACTICE


This annual report includes documentation of the drawing curriculum as taught at the Carver High School for the Arts and Technology. Chair Joe Giordano describes a strong drawing curriculum that permeates all foundation work in photography, sculpture, and painting. Report contains examples and reports on drawings completed by freshmen, sophomores, juniors, and seniors that illustrate the developmental nature of the drawing program.

Describes a personal course of artistic development as reflected upon by a highly able student who became a professional artist. Her reflections are set into context by her high school art teacher.

A reflective discussion of the environment that supported high school students in their artistic development, including a developmental program, studio space, critical discussions, research on art and artists, sense of community, and mentorship.

MODELS FOR PRACTICE

In his teaching, London uses a number of strategies specifically employed to empower the student to make choices that range from selecting and setting up a personal work area and preferences for media, format, and scale of work to indicating preferences for feedback on work.

Session III from the 1989 Indiana Symposium. Thoughts from a panel discussing the role of curriculum in providing structure and/or freedom as well as the need for appropriate physical spaces for study and the purposes of having art and music students work together.

Session IV from the 1989 Indiana Symposium. Thoughts from a panel discussing and comparing directed instruction with problem-solving methods.
Creating Supportive Conditions for Students with Special Needs

THEORY

Visual arts experiences develop intellectual and visual sensitivity as well as problem-solving skills for all students, including those who are disabled. Creative expression and critical response open the horizons for all learners, helping them to live fully in the schools and communities (Pappalardo, 1999). Henley (1992) recounts Lowenfeld’s vision for art education as “facilitating self-expression, promoting independence, encouraging flexible thinking and facilitating social interactions, as well as developing aesthetic awareness” (p. 12). In a similar fashion, Henley envisions “therapeutic art education” as an instructional approach where the art process serves as a medium for addressing the various concerns of learners while promoting other dimensions of their growth and development (p. 16).

Inclusion, “stated simply, consists of including all children in activities of the mainstream environment” (Schiller, 1999, p. 9). It requires some advance planning and collaboration with other professionals as well as certain strategies such as cooperative learning, individual contracts, and communication with teacher aides. Familiarity with current research can help anticipate potential areas of strength as well as challenge (Golomb, 1996). Teachers who proactively employ certain strategies can make informed and appropriate instructional decisions.

Normalizing instruction in art for students with special needs keeps the focus on the teaching of art content and gives students a voice in shaping the course of their education. As such, normalization differs from the medical-prescriptive approach, which promotes labeling individuals, equates disability with sickness and deviancy, and may reinforce negative stigmas and stereotypes (Blandy, 1989).
PRACTICE

“By far, the most important thing to keep in mind is that the student is an individual first—an individual who just happens to have a disability; you are dealing with a person, not a label….The teacher should treat them as any other students deemed more ‘able,’” concentrating on their strengths rather than their weaknesses; be positive and honest” (Pappalardo, 1999, p. 43).

Recommended Strategies

Interview the exceptional student as well as the educator who is responsible for implementing the student’s educational plan (Guay, 1999; Loe sl, 1999).

An interview can determine student strengths, dominant learning style, and specific areas of special needs. While students with disabilities have specific written behavioral plans that must be the shared responsibility of all educators working with the student, the typical IEP is relatively awkward to review due to its length and lack of information useful in the art room setting. An interview sheet can help provide information relevant to planning art instruction such as health or safety issues and whether the student is receiving related services in areas including speech and language instruction or physical and occupational therapy. Consultations with other specialists serving the learner may further help identify ways in which the art curriculum can support or complement these instructional plans.

Review room arrangement, seating plans, and storage of materials (Guay, 1999; Henley, 1992).

The goal should be to ensure that the student with disabilities has equal or reasonable access to all zones of the art room in order to maximize independent functioning as an art student. Consider sight lines, pathways, and seating arrangements as well as safety issues. If appropriate, establish procedures for securing hazardous equipment such as paper cutters and kilns.

Prepare the student with special needs for art class (Guay, 1999).

If possible, prior to attending art class, share information with the student regarding the organizational structure of the class or classroom routines as well as your high expectations for mastery of the art curriculum. Plan seating that includes the exceptional student amidst non-disabled peers and for introductions to peers.

Development of positive, proactive communication linkages (Schiller, 1999).

Share information, particularly benchmark successes, with the student, parents, and educational personnel responsible for implementing the learner’s IEP.

Normalize instruction for special-needs students as much as possible (Blandy, 1989).

While inclusion means including the student with disabilities in all phases of the ongoing art program, normalization means not only keeping the curriculum for special-needs students as close as possible to the regular curriculum but setting high expectations as well. Avoid temptations to isolate the student or to over-manage artistic output. Model respect and praise student problem solving to provide behavioral cues to classmates. Teach in a way that allows special-needs students to act and appear in ways appropriate to their age. Promote independent functioning and positive interactions with non-disabled peers.

Train aides or peer assistants who accompany exceptional learners to the art room (Guay, 1999; Schiller, 1999).

Many such assistants need your cues to be able to understand what constitutes interference with a student’s output. Help define the role you want them to play in art instruction.

Make adaptations, as necessary, that are as close as possible to the regular program (Guay, 1999).

Adaptations should be age appropriate and include opportunities to acquire important skills and concepts. Motor impairments, which limit independence, present design problems that can sometimes be solved with creative thinking and experimentation (Zederayko & Ward, 1999).
RESEARCH

In this preface to a special edition of *Visual Arts Research*, Golomb provides an introduction to a series of research studies including case studies, longitudinal analysis, and comparisons of drawing development of various individuals diagnosed with autism, mental retardation, and specific syndromes. Strengths as well as developmental insights are discussed. Two articles consider artistic giftedness with specific autistic and Down syndrome persons.

REPORTS FROM PRACTICE

Article illustrates how creative solutions to motor impairments allowed two different students with special needs to become independent in their art-making efforts. The introduction discusses the meaning of “inclusive art.”

MODELS FOR PRACTICE

Blandy compares a medical prescriptive model with ecological approaches and normalization, making a case for the latter in art education. The article includes the description of an apprenticeship model for inclusion of students with disabilities as full members in a community project.

This chapter is worth reviewing for ways in which art can support verbal development.

“A Way In” examines strategies for instructing students with disabilities in integrated classrooms. Guay includes ways to prevent problems and improve behavior, using student strengths while considering the nature of different kinds of disabilities, instructional support strategies, and evaluation.

Henley discusses the differences between art therapy and therapeutic art education and offers some guiding principles for normalizing instruction while being sensitive to issues and concerns of the learner. Among the issues he covers in depth are “Devising a Studio Space,” “Motivation,” specific suggestions for working with different art media, and making adaptations for studio-based instruction, as well as criticism and aesthetics.

Loesl includes a student information form designed to obtain basic information relevant to the art class, i.e., chronological age, mental age, nature of disability, characteristics that might be dangerous to self or others, medical problems to be aware of, current adaptations proving successful with the student, and other details that might be important to the student’s success in art (p. 61).

General characteristics one might encounter in specific populations of students with exceptional needs are outlined.

This chapter highlights the importance of developing collaborative partnerships with other educators and specialists in the field of special education.
Shaping Learning Experiences for Students with Special Needs

**Better Practice**
Teachers who plan instruction for exceptional learners by modifying and adapting tasks promote the fullest possible engagement with the artistic process.

**Theory**
Teachers may need to tailor learning experiences to the needs of special students who may not be able to complete all steps of an art activity. Task analysis can help identify essential steps in the mastery of basic skills. Modifications increase the possibility that these students will be able to achieve objectives that are the same as or similar to those of the original activity. Adaptations of creative and responsive experiences can also build up areas of weakness and enhance areas of strength.
Task Analysis

Teachers of students with disabilities can be dismayed when art activities do not succeed, assuming that students’ unique limitations prevent them from learning the skills necessary to complete projects that have been designed particularly for them. The problem may lie, however, in the instructional planning rather than in the students’ conditions.

Task analysis may resolve this problem. This strategy breaks down the complex process of art making into the smallest number of sequential, behavioral steps necessary for mastery. Five activities are involved in task analysis.

1. Analyzing a task forces the teacher to become thoroughly familiar with a given process. A teacher who clearly understands what a process entails can better anticipate at what step children might begin the process or when they might encounter problems. This format will particularly aid inexperienced practitioners who may have to retrain their thinking about techniques so as to better assess what processes will be appropriate for each population (Henley, 1992, 35).

2. Reduce the art activity to a sequence of small, observable behaviors.

3. Record the behaviors.

4. Review to make certain the behaviors are in sequential order.

5. Test the sequence with an individual student.

6. Make any necessary modification.

Thus instructional sequences can be designed to meet the needs of individual students through selection of materials, reinforcement activities, and objectives for progress. Teaching would occur one step at a time in order to allow students to respond, receive feedback, and practice.

Principle of Partial Participation

For some students with disabilities, an art activity can be too difficult, even with individualized assistance. One way to deal with this problem is to employ the principle of partial participation. Blandy et al. (1988) offer an eight-step strategy for modifying materials and/or processes to meet the special needs of these learners.

1. Evaluate a nondisabled peer’s performance to identify the steps required to complete the art activity.

2. Evaluate the performance of the student who is having difficulty, particularly noting what the student can and cannot do.

3. Determine what the student might be expected to learn or be able to do (by talking with the student, reviewing what the student can do, considering the student’s history, and talking with other teachers and parents).

4. In the same way and with care to maintain high expectations, determine what the student is unlikely to learn or be able to do.

5. Develop hypotheses as to how the activity can be modified based on what has been found.

6. Inventory the skills associated with the modification using a nondisabled peer.

7. Based on the information collected about the student with disabilities and how a nondisabled person would perform the possible modifications, select an individualized modification for the student.

8. Determine which skills the student will now be expected to acquire.

Modifications in materials or sequence of steps in the activity are examples of adaptations that this strategy might yield. The advantage of the strategy is that students would be able to par-
participate in an activity that is the same as or similar to that experienced by their chronological-age peers.

*Using Adaptations to Modify Learning Tasks*

A central concept in planning art instruction for students with special needs is adaptation, that is, the modification of what would be presented to students without disabilities in order to fit the individual needs of these special populations. Special-needs students include those who are learning disabled, behaviorally disabled, hearing impaired, cognitively disabled, visually impaired, and physically disabled. Some students have multiple disabilities. Because of this, no one adaptation can be made that will necessarily fit all students with special needs. Instead, adaptations must be developed to fit the needs of individuals.

Examples of adaptations include the following:

- Some exceptional learners have poor concepts of their bodies and would benefit from art-making experiences that have body images as subject matter.
- Some have a low frustration level and attention span. The availability of a second activity or a sequence of activities may help in this situation.
- Other students might be confused by too many choices; it may be easier for these students to work with a limited array of materials and choices.
- In some cases, repetition of learning activities may reinforce what has already been learned.
- Adaptation of art-making materials may promote the ease with which the materials are manipulated. For example, it may help to tape drawing paper to the table so it doesn’t move around and to weight paint and water jars so they tip less easily.
- In all cases, adaptations should be age appropriate and as close as possible to standard procedures. And while adaptations are a critical strategy, it is important that they not substantially diminish the curriculum.

---

*MODELS FOR PRACTICE*


A strategy for enabling students with disabilities to accomplish the same objectives (or as nearly the same as possible) is explicated.


Berry describes the importance of record keeping for special education students. Examples are provided.


Six guidelines, accompanied by strategies and examples of art activities, are presented. They include the use of age-appropriate materials; the incorporation of the principle of partial participation; the development of a cue hierarchy; the analysis of current and subsequent environments; attention to multicultural issues; and participation in the greater art community.


Henley devotes Part III of his textbook to Adaptations with sections addressing behavior, creative expression, assessment, aesthetics, and criticism. He further describes task analysis (see Page 35), illustrates how task analysis might be applied to handbuilding with clay (see Page 183), and discusses the importance of task analysis when working with learners who have hyperactivity and attention deficits (see Pages 209-210.)


A full description of task analysis appears in this entry.


"A Way In" examines strategies for instructing students with disabilities in integrated art classrooms. It is designed to provide teachers with ideas that enable special-needs students to creatively express, through art, ideas and life experiences and to meaningfully respond to their own art and the art of others. By focusing on instruction in heterogeneous classrooms, it acknowledges the changes rapidly taking place in special education placement due to research, legislation, and case law.
OUTCOME I

Developing a Repertoire of Skills for Visual Perception and Artistic Response

Drawing on Imagination, Memory, and Experience
Tapping the Narrative Impulse
Working from Observation
Developing an Expanded Vocabulary for Visual Form
Expanding the Repertoire for Visual Perception and Artistic Response
Reflecting on Perceiving and Responding Visually
Drawing on Imagination, Memory, and Experience

**P R A C T I C E**

**Previsualization, Guiding Questions, Verbal Prompts, and Existential Questions**

Previsualization, one of many strategies advocated by Lowenfeld and described by Saunders (Hurwitz & El-Bassiouny, 1993), aims to create a full and rich image in the mind’s eye prior to beginning work. Questions used to guide previsualization typically involve who, when, where, how, and why. With eyes closed, the teacher begins with an invitation to return to a memorable time or moment, at the harbor or the zoo or in the out of doors, and proceeds to ask questions that help locate the self in relation to the memory, thinking about the setting, time of day, weather, season, and point of view. Questions continue to prompt images of who else might be there and what people are wearing and doing, drawing attention to details such as props, vehicles, buildings, etc. Further questions encourage thought about why one is there, the occasion, the feelings associated with the moment, and what is most memorable. When a full and rich image has developed in the imagination, work can begin to bring the image into visual form. A wide range of universal themes including family, birthdays, shopping, traffic, storms, harbors, zoos, recess, amusement parks, and sports can serve as useful departures for this strategy.

Another strategy for working from imagination employs guided questions designed to solicit a creative response. Verbal cues and open-ended questions focus on visual qualities such as size and shape; tactile and sensory qualities such as texture, feel, smell, and taste; and distinguishing characteristics or details that lend character or form to the imagined subject.

Verbal descriptions offer another strategy for working from the imagination (Wilson et al., 1987). Here very descriptive language, loaded with strong visual cues, stimulates imaginative imagery.

exercises and steps to guide students through a series of changing mental images. Here the strategy gives students the flexibility of either controlling their images as they wish or letting them roam freely. Teachers direct students to draw the visual qualities of their changing mental images.

London (1989) offers an approach to working from imagination and intuition, grounded in what he calls a holistic paradigm, that serves deep and profoundly human needs to consider important questions such as Who am I? Why am I here? What is this journey about? In his method, establishing a level of trust, understanding of purpose, acceptance, and openness is a critical step in the process. A centering exercise or discussion typically serves as an introduction, setting the stage for a drawing prompt that may take the form of an existential question. Given this thoughtful and caring preparation, students are invited to respond intuitively and imaginatively, taking care to attend to the sensuous nature of art materials and the manner in which the image unfolds. The process then extends into a method for sharing imagery that focuses upon deeper reflection rather than critical analysis. London asks the image maker to help determine the nature of the dialogue allowing opportunities such as telling the story of the image, asking for others to “read” the image, and sharing written reflections inspired by one’s own or others’ images.

Developing Memory and Imagination Imagery with Visual Sources

Although an image might be inspired by imagination or memory, it should not be assumed that using visual source material is discouraged. Rather, the goal should be to give students permission to seek those sources that will allow them to bring their image into as full and rich a state as possible. Having ideas and skills for solving representational problems more often than not makes the difference between an image well realized and one abandoned. Preliminary sketches and lists of essential subject matter can help students identify aspects of the image they wish to depict. Then students can research ways to depict desired imagery using photographs and works by artists as references. Drawings by slightly older children or artists who model solutions for depicting people or characters, showing action, and developing a composition can help advance students’ representational skills while they are working on an image of personal importance.

Exercising and Testing for Visual Memory

Memory drawings of an observed scene such as a corner of the art room or a specific artwork, via reproduction or in a museum setting, can be used to exercise visual memory. Using “telescopes” can facilitate practice in looking at the whole as well as the parts. A process whereby an inventory is conducted is a critical step prior to recreating the image from memory. A method for counting the inclusion of objects, features, and details as well as for giving structure to the whole helps students understand how well their visual memory functioned. Given that visual memory is often associated with artistic ability, a visual memory test was one of several assessments developed for selecting middle school students for a gifted and talented program in Brookline, MA. (Baker, n.d.). As a group, students spent about 10 minutes carefully examining van Gogh’s Bedroom at Arles, naming all the objects in the image and looking for the underlying structure and then were invited to draw it from memory. The results offered evidence that could be evaluated quantitatively and qualitatively.

Research


Models for Practice


Hurwitz and El-Bassiouny (1993). Memory and experience. Cairo: Dar Al-Maaref. (A limited number of copies are in the library at the Center for Art Education at the Maryland Institute College of Art.)

Lowenfeld’s questioning strategy is described in an introduction. Children’s drawings from three countries (Taiwan, Qatar, and the United States) based on several universal themes illustrate various solutions from three levels of elementary-age students. An excellent source for exemplary drawings including many done by students in Maryland. Note: some of these drawings are reproduced in Teaching Drawing from Art. See below.

London, P. (1989). No more secondhand art. Boston: Shambala Press. London provides an introduction and rationale to an approach designed to engage novice through expert image makers in an intuitive search for meaning. The book includes 12 exercises that have proved successful with adults, some of which can be adapted for use with certain populations in the schools.


Tapping the Narrative Impulse

**THEORY**

The narrative impulse develops early in childhood and serves for a lifetime as an essential and powerful way of making sense out of experience through the construction of stories (Bruner, 1996; Thunder-McGuire, 1990; Olson 1992 & 1997; Kellman, 1995; Duncum, 1997; Johnson, 2001). Psychologists suggest that stories can deal with different kinds of realities including the real and imagined, the conscious and the subconscious, and the past, present, and future (Kreitler & Kreitler, 1972). Stories have structures that include beginnings, middles, and ends; more so, they are constructed around sequence and action, cause and effect, conflict and resolution, change and growth, all in an effort to find or create meaning. Visual storytelling has a strong tradition that persists from the beginning of art into contemporary work. Together, developing a visual vocabulary for storytelling, exploring narrative formats, and pursuing different ways of generating stories provide substantial learning in art while serving, at the same time, a very personal and human need.

Unsolicited drawings and those created in response to open-ended art designed to accommodate personal stories offer a window into the lives young people lead, their journeys, fears, losses, discoveries, and accomplishments (Wilson & Wilson, 1979). The narrative work of adult artists serves in similar ways to claim identities, map journeys, tell stories, get power of ideas, mix with others, and dream (Lippard, 1990). A close look at a body of adolescent work, developed over time, can sometimes reveal the way in which art can serve as a holding form for the process of journey and return, change and growth (Johnson, 2001). Some would even claim that all art might be thought of as narrative in that the making of objects is connected to personal and artistic stories (Olson, 1987).

Duncum’s (1997) analysis of the historical record, along with more contemporary accounts, suggests that the themes that emerge in child and adolescent art are somewhat stable over time even though actual subject matter may reflect specific cultural experiences. He also notes that although there are variations along gender lines, themes tend “to conform to the major preoccupations of the life phases of these youngsters” (p. 113).

An analysis of themes found in children’s story drawings suggests that four different kinds of realities may be at work in narrative art: common themes associated with everyday experience; archaeological themes that reveal conscious and unconscious beliefs and feelings; normative themes that deal with rules and social norms; and prophetic themes that anticipate the future (Wilson & Wilson, 1980).

**BETTER PRACTICE**

Teachers who allow the narrative impulse to fund image making help learners of all ages construct personal meaning while developing a repertoire of representational and expressive skills.
Different kinds of questions and prompts can encourage narrative thinking and invite responses for a story told visually.

Some narratives emerge spontaneously as with young children when the act of drawing seems to inspire a story and the story, in turn, gives the child new ideas to draw. Some visual stories appear to be incomplete but unfold with a simple question: “Tell me about your drawing.” Verbal and visual language often work together, inspiring each other as when children collaborating on a large piece or working next to each other seem to talk as much as they draw. Narrative work seems to require and inspire dialogue with others. It is certainly aided by the sharing of ideas as students “read” each other’s images, offer ideas and suggestions, and respond with laughter, amusement, joy, interest, and compassion. For some, telling stories visually becomes a passion, even an obsession, and can lead to a host of careers including illustration, cartooning, animation, filmmaking, art, and teaching.

Narratives that deal with everyday life provide students important opportunities to reflect upon and find meaning in their experiences. A simple invitation to revisit an ordinary day or time can produce good material for a visual story. An invitation to recall memorable events and significant others (Ruopp, 1996) can inspire more complex visual stories. An invitation to reflect on cause and effect might produce imagery illustrating insights gained from experiences good and bad. Narratives also arise from reflecting on the observed world, its cycles, rhythms, and processes for sequential change. Certain themes, such as journey, can prompt a range of stories from everyday travel and adventure to relocation and starting a new life.

Narratives may also be inspired by works from different art forms including literature, music, and art. Folk tales, children’s storybooks, and the work of illustrators are an especially rich resource. Certain works of art can be used to inspire narrative responses while giving practice with specific expressive options, as in visualizing “what happened next?” (Wilson et al., 1987). Myths, legends, fairy tales, and poetry all provide excellent material for visual storytelling. Students may develop their own illustrations for works authored by others or recast or reinvent old stories to yield material for new visual stories.

Original stories, myths, tales, and legends may emerge from different prompts. Here, text and image often feed each other. Narratives can arise out of the opportunity to speculate, project, and dream. A simple invitation of “what if...” can stimulate imaginative responses. The creation of characters and the invitation to imagine an encounter between them can generate a story. Inventing a story to explain a phenomenon can produce ideas for a legend or myth. Creating a story with a lesson or moral is another avenue to storytelling in both words and images.

Opportunities to work intuitively and reflectively, exploring reactions and feelings, hopes and fears, connections and relationships, questions and concerns, help students get power over ideas and feelings. The results can be humorous, serious, dark, or inspirational—work that comes from an interplay of the conscious and the subconscious, the intellect and the emotions.

Developing a Vocabulary for Visual Narratives

Developing a vocabulary for visual storytelling can be approached in a number of ways. Visual narratives require a vocabulary for creating characters and settings, exaggerating features and or characteristics, showing time of day or weather, illustrating change over time, or using different points of view to lend drama to a story. Representational skills such as drawing people; showing action and emotion; showing different points of view; and illustrating change, transformation, and metamorphosis are often needed (Olson & Wilson, 1979). Narrative vocabularies can also be built as students learn how to find and use source material that can help them solve the representational problems within their own works.

Building a vocabulary for visual narratives can take place incrementally over the years where a developmental approach is tied to students’ growing capacity for increasingly sophisticated representational problems and content (Carroll & Colleran, 1983). Such a vocabulary may also be developed through extended units at any grade level and adapted to the developmental level of students, culminating in finished products. Semesterlong instructional sequences have proven effective as early as the fourth and fifth grades (Price, n.d.). Encouraging students to draw from popular culture may also help sustain an interest in narrative drawing among adolescents (Toku, 2001).

Matching Story to Visual Form and Media

The history of art is replete with narrative forms that range from rock drawings and cave paintings to digital animation and film. Different visual forms accommodate story in different ways. Certain forms are sequential in nature such as a book, scroll, storyboard, cartoon, or animation. Forms such as story quilts or collages offer, simultaneously, story elements literally pieced together in a whole. Some forms are instruments of story and drama including puppets, costumes, masks, headdresses, and other props. Other forms, such as single images, sculptures, chairs, shoes, boxes, and containers, may illustrate a particular moment in a story or have story embedded in them, thus prompting the question: “What story might this object tell?” Contemporary media such as
digital imaging accommodate development of original imagery while encouraging layering, juxtaposition, appropriation of source material from art and popular culture, and the integration of text and image.

Feeding Each Other: Narratives in Words and Images

Reports suggest that movement among symbol systems develops ideas (Grauer, 1984; Olson, 1987, 1998). In one case, a visual learner having difficulty generating written language was invited to make a drawing, talk about it, and then return to writing (Olson, 1987). Comparison of the pre and post writing samples shows that the three-step intervention produced writing more loaded with emotion, freer from error, and richer in detail. In a similar way, verbal learners who find themselves stuck in the process of visualization can use written language to feed ideas and identify representational problems to solve, in making images richer. In short, providing students with the opportunity to move among symbol systems, as it serves their needs to construct meaning, places words and images in a symbiotic relationship.

Assessment of Narrative Drawings

Wilson and Wilson (May 1979) create a prompt for a six-part visual image for which Baker (n.d.) developed an assessment model for scoring narrative drawings that yielded a numerical rating. As such, it provides a model for constructing evaluation instruments and suggests that narrative work can be assessed for narrative techniques or conventions in the rendering of subject matter and composition as well as for the complexity and richness of the story content.

References


Wilson, B., & Wilson, M. (1981, October). I draw— you draw: The graphic dialogue. School Arts, pp. 50-55. Article considers the value of a drawing dialogue between two or more drawers as a spontaneous and playful way of extending graphic vocabularies and ideas.

RESEARCH


Olson, J. (1992). Envisioning writing: Toward an integration of drawing and writing. Portsmouth, NH: Heinemann Press. Olson’s dissertation research (Columbia University Teachers College), reported in this book written for both classroom and art teachers, supports in theory and practice the significance and merits of engaging learners in visual storytelling. It is illustrated with visual examples as well as models for assessing visual storytelling. Olson identifies a series of exercises useful in developing a vocabulary for visual storytelling. The exercises cover drawing as many characters as possible, depicting the same scene in different times of day or seasons of the year, exaggerating features of a character, showing different facial expressions, depicting a sequence of actions, and depicting a scene or character from different points of view (close up, far away, bird’s-eye view, worm’s-eye view). All are illustrated with examples of work by elementary students.


REPORTS FROM PRACTICE

Carroll, K. (2003, April). Encouraging visual storytelling. School Arts. Excerpts from the exhibition text written to accompany the show organized by the Alumni Study Group for Narrative Art held at the Maryland Institute College of Art in 2000. Illustrated with exhibition shots and examples of student work.


Olson, J. (1987, September). Drawing to write. School Arts, pp. 25-27. Illustrated article reporting an intervention strategy for visual learners needing ways to generate content for written work. Provides pre and post examples with a description and explanation of the process that involves drawing and talking about the image.

MODELS FOR PRACTICE


Howard County Art Teachers. (2001). Telling images: Stories in art. An exhibition of narrative art work, K-12. Howard County Center for the Arts, March 2001. An exhibit illustrating a range of narrative formats, themes, and stories across the grade levels validating the richness of the possibilities for object and image making as well as the relationship linking reading, writing, and art.


Working From Observation

**P R A C T I C E**

The following suggestions are drawn from research, reports from practice, and models for instruction.

Students, K-12, can succeed in drawing from observation provided an instructional method helps them think about what they are drawing, visualize it (in terms of edges, shapes, spaces, relationships, details, light, and shade), and determine ways to proceed (Salome, 1965; Nicolaides, 1969; Salome & Reeves, 1972; Salome & Szeto, 1976; Dodson, 1985; Langan, 1995; Edwards, 1989; Smith et al., 1998).

Practice with observational drawing can begin as early as kindergarten. Young children need interesting and engaging subject matter such as bicycles, plants, and interesting gadgets as well as dialogues to guide the process of seeing and drawing (Smith et al., 1998).

**T H E O R Y**

In the history of art education, the study of drawing development has focused primarily on drawing from memory, so much so that the field has largely been blind to the capacity of young children to draw from observation. Wolf (in Smith, 1998) reminds us that drawing from observation is, in part, learning to see and that marks on paper record the process of looking. Other definitions of observational drawing include investigation of internal structures, movements, and/or proportions, as well as the development of an expressive response or an exploration of artistic issues (pp. 6-7).

The goal of observational drawing should be to further expand and develop a repertoire of drawing strategies useful in depicting a range of ideas. Young children, beginning in kindergarten, can integrate observed shapes and details into their drawings, revising schemata to incorporate new information. Periodic practice with observational drawing throughout the years helps learners transform a linear approach to drawing to one that can render form, light, and shade, and describe increasing amount of detail, achieving convincing likenesses. The need to master the conventions of Western representation is so strong that art educators have identified an “Adolescent Crisis” in the process of learning to draw. Without strategies for representation that meet the expectation of looking “real and right,” many students stop drawing altogether (Golomb, 1992). Safe passage through this crisis requires clear and specific instruction and often a combination of strategies (Edwards, 1989; Dowell, 1990). Those who do learn to draw convincing likenesses are more likely to feel confident about their artistic ability, while those who do not may see themselves as unable to go further in art.
Upper-elementary children particularly enjoy thinking the way scientists do as they draw small objects from nature (Gainer & Child, 1986).

Students need more than perceptual cues to master the conventions of representational drawing; imitation and copying may have a role to play as well as modeling drawing procedures (Wilson & Wilson, 1977; Rush et al., 1980; Duncum, 1984; Dowell, 1990; Wagner, 1994; Langan, 1995).

Observational drawing can serve upper-elementary students’ need to make things look “real and right,” especially when that means increasing amounts of detail (Burton, 1980).

Middle school students respond well to objects that are “weird, nasty, and strange” partly because they are unusual and outside their standard vocabulary of schemata and can be broken down into parts that have interesting details (Mitchell, 2001).

Ayres (1998) confirms that most middle school students have the desire, technical facility, and cognitive capacity to draw realistically. She reports high success rates with a variety of learners in response to a structured sequence that begins with drawings of record, includes practice with strategies adapted from Nicolaides and Edwards, and concludes with figure studies or portraits.

Adolescents have an interest in mastering a convincing likeness of faces, hands, shoes, interiors, and figures. Certain subject matter, such as portraits, can be revisited each year, developmentally increasing the challenges, skills, and strategies for drawing (Popp, 1995, 1997; Chambliss & Martel, 2002).

Artists who taught themselves to draw suggest additional ideas about how to sequence subject matter. For example, Edward Munch practiced drawing small objects and still lifes (form, shadow, detail, reflections) at 12, interiors at 13 (deep space), land and cityscapes (space and composition) at 14 and 15, and the figure (form, proportion, gesture) at the age of 17 (Carroll, 1994).

Popp (1999) reports the impact of a highly structured sequence in Art I at the high school level, adapted from Betty Edwards, that begins in September and works toward portrait drawing in February. The approach has proven successful with a broad population of students, empowering them to think about themselves as artists and drawing many into art electives with a vocabulary and basic skills that can then be further developed.

Orchestrating drawing from observation requires a combination of strategies. While a good demonstration helps illustrate the process for drawing, the following suggestions increase the odds that students will succeed.

A structured dialogue can help students connect with subject matter, think visually, prepare to draw, and reflect on the results (Burton, 1980; Smith et al., 1998). Association dialogues help learners recognize and/or connect with objects they will draw. Visualization dialogues help students see subject matter in terms of parts and relationships. Transition dialogues aid students in thinking about how to begin and proceed with a drawing.

Guiding the drawing process may step students through a drawing of a difficult subject such as a figure by directing students’ attention to certain features, details, relationships, and proportions (Olson, 1992).

Taking time to explain drawing development, why drawings look the way they do, the purpose of specific exercises, and ways in which drawings are improving builds drawing confidence, especially among middle schoolers (Ayres, 2001).

Because observational drawing requires a relaxed state of attention, references to “a final” drawing can actually cause students to freeze up. Simply extending an invitation to add more observed or imaginary content to one or more of the drawings produces less anxiety in an attempt to create a fuller and more meaningful composition (Ayres, 2001).

Examples of partially completed or finished drawings show how different techniques and strategies can solve drawing problems. Master drawings may be copied with accuracy or innovation in mind (Wilson et al., 1987).

Expressiveness in drawings can be encouraged through a number of strategies. For example, masks, dramatic light, and music can enhance practice with contour portrait drawing (Costello, 1987).

Many styles employ some degree of observational representation and suggest ways to bring variation into the process of working from life. Different styles suggest specific visual strategies and can be worked into an observational sequence to vary the instruction, develop expressive skills, and build a familiarity with different styles of art (Popp, 1999; Wilson et al., 1987).

What begins as literal can be taken to metaphorical levels of expression; showing students thematic work (such as portraits) by a wide variety of artists can help them move beyond observational accuracy to more personal and expressive forms of expression (Chambliss & Martel, 2002).

A process checklist can contribute to self-assessment (Dodson, 1985). Criteria such as the nature of the line quality, the relationship of parts to the whole, elaboration in the form of detail, embellishment, decoration, or space filling, complexity, and energy can be used to evaluate drawings (Hurwitz & El-Bassiouny, 1993, p. 19). Levels of performance can also be
OUTCOME 1: DEVELOPING A REPERTOIRE OF SKILLS FOR VISUAL PERCEPTION AND ARTISTIC RESPONSE

identified; work may be “Emerging,” “Proficient,” or “Advanced” (Chambliss & Martel, 2002).

Teachers confirm that process-portfolios, beginning with drawings of record, provide evidence of progress and, as such, are a powerful tool in building confidence, especially among adolescents who are just beginning to learn to draw from observation (the Study Group for Observational Drawing, 2000).

RESEARCH


Analysis of Munch’s early work revealing simultaneous strategies of narrative drawing, drawing from objects, interiors, landscapes, and figures from observation plus drawing from art and popular culture, as well as insights into his development of observational skills related to specific subject matter and representational problems.


Report on a dissertation study (University of Maryland) in which three classes of Art I high school students each received an exclusive referent (live model, photographs, or copies of master drawings) in a three-week unit on drawing the human figure. Findings suggest that drawing from live models, as the only visual referent, may be less effective than photographs and/or master drawings.


Study analyzes the various strategies famous artists used to develop their skills and concludes that young children develop a repertoire of strategies including observational drawing. Copying was the most common strategy.


A psychologist of art, Golomb has compiled a thorough and critical review of drawing research probing questions about why young children draw, what they are doing when they draw, and how they solve drawing problems. Ultimately she asks how it is, given that most children begin by drawing naturally, that these two reports describe studies that continue the work begun by Salome earlier.


Salome found that directed perceptual training, which included observing contours and points of maximum information, increased the amount of visual information in children’s drawings.


In helping children develop drawing strategies and devices that meet their developmental expectations.


Review of several contemporary drawing programs for early adolescents, including Brooks, Edwards, McFee and Degge, Lowenfeld and Brittain, Wilson, Hurwitz and Wilson, and Wilson and Wilson. Finds three orientations to drawing instruction that parallel three major developmental perspectives: perceptual, psychosocial, and cognitive. Suggests that programs matched the developmental needs of learners.


Compares the use of predrawn completed and partially completed examples with a demonstration, including tracing the object in the air, to illustrate contour drawing. Study found that greater gains in visual information were made when students observed predrawn examples. Study suggests that demonstration alone may be insufficient for some learners.

Langan, J. L. (1995). The influence of visual models and instructional methods on the development of students’ graphic representations. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign. An experimental study comparing drawing performance of fifth graders by testing four different conditions. Results suggest that modeling drawing procedures increases drawing both two- and three-dimensional subjects. This study used videos to model drawing procedures.


Review suggests the period between ages 4 and 12 fosters significant graphic development. Further, that “perception and cognition develop from the general to the specific, from the simple to the complex, and from the undifferentiated to the differentiated” (p. 60). Concludes that instruction can play a significant role in helping children develop drawing strategies and devices that meet their developmental expectations.


An experimental study with fourth graders comparing the effects of two alternative approaches to drawing. Results showed significant gains in drawing the face when students were provided two-dimensional models as well as discussions of artists’ portraits. The control group was given the same task without visual or verbal clues for solving the problem.


Study suggests that while some models may emphasize multi-path developments, advancements in one realm of graphic tasks do not necessarily translate readily to other graphic tasks.

REPORTS FROM PRACTICE

Ayres, J. (1998). Unpublished master’s thesis: Drawing as a way of knowing: Developing visual thinking skills in the adolescent learner. Towson University. This study was set up to investigate the behavioral characteristics of the middle school child, determine the drawing needs and interests of students during the
middle school years, determine the importance of visual thinking in the cognitive development of adolescent children, and to investigate selected drawing techniques and teaching strategies of Nimon Nicolaides, Betty Edwards, and Mona Brooks. The report begins with a review of the literature on developmental characteristics, drawing, perception, and cognition and contains an illustrated analysis of the progress made by five students who represent a range of student ability including average, gifted, and exceptional learners. She concludes that teaching students to draw from observation is more than an exercise in drawing; it is a lesson in thinking and a powerful medium for expressing a unique interpretation of the world. Further, students who are provided the tools, motivation, time, and strategies can learn to draw.

Ayres, J. (2001). Presentation to the Study Group for Observational Drawing, Howard County Schools, Maryland. Ayres reports on time taken to survey middle school students about their desire to draw and to address myths about drawing development. Students need to be reminded that drawing is a skill that can be taught and learned, not just a talent. Doing is one of several critical elements in an instructional sequence designed to build confidence with observational drawing skills.

Burton, J. (1980, December). Representing experience from imagination and observation. School Arts, pp. 26-30. One of a series of articles that begin with mark making, including dialogues for guiding work with materials and representational strategies; this article addresses upper-elementary students’ need to produce drawings that look real and right and discusses approaches to drawing from observation and imagination.

Carroll, K. (2000). Notes from the Study Group for Art in Early Childhood. Funded by Goals 2000 from the Maryland Department of Education, this Study Group met over the course of three years to discuss observations and ideas for teaching art to kindergarten children.

Chambliss, C., & Martel, M. M. (2002). Images of self: Literal to metaphorical. Presentation, National Art Education Conference, Miami Beach. Presentation suggests that self-portraiture, as a theme, is an accessible starting point for inspiration at the high school level. An abundant assortment of examples inspires a broad range of solutions. The authors identified three levels of performance: Emerging (where the subject matter is used to develop technical skills for working from observation); Proficient (where technical skills continue to develop while beginning to use more expressive aspects of the self-portrait as subject); and Advanced (where self-portrait is the basis for the creation of work, or a body of work, that is more complex technically and conceptually).


Mitchell, M. (2001). Comments shared with the Study Group for Observational Drawing, Howard County Schools, Maryland. Mike Mitchell reports that “strange, nasty and weird objects” intrigue middle school students, appeal to their sense of humor, and provide the right kind of challenge to help them break form into shapes, lines, textures, and values, thus empowering them to increase their representational skills.

Popp, L. (1995, 1997). Sequential artistic development in high school as evidenced by self-portraits. Presentations, respectively, at NAEA and NAEA conferences. An illustrated presentation that illustrates how developments in artistic growth can be seen by revisiting the self-portrait annually in high school.

Popp, L. (1999). Being an artist in Art I. Presentation at the NAEA national convention. An illustrated presentation on a curriculum for Art I adapted from Betty Edward’s Drawing on the Right Side of the Brain and a discussion of the benefits of integrating a sequential approach to observational drawing with the history of art. Such an approach can provide an introduction to styles that builds vocabulary, concepts, and skills that can empower a broad population of students to see themselves as artists.

Smith, N., and the Observation Study Group. (1998). Observation drawing with children. New York: Teachers College Press. Describes developmental characteristics of learners from kindergarten through the sixth grade and contains scripted lessons and samples of student drawings from observation for each grade level K-6. Reviews art education’s lack of focus on observational drawing with young children, redefines working from observation, and models a teacher-student dialogue designed to help children associate with subject matter, think visually, and consider what strategies they might use to draw it. The book is a product of several years of conversations among the lead author and a study group of six teachers.

Study Group for Observational Drawing. (2001). Howard County Public Schools. A voluntary group of middle school teachers who meet regularly to discuss strategies and share ideas about effective ways of teaching observational drawing, collect data from surveys, and examine work samples by a range of students.

Models for Practice


Eccles, G., & Edwards, I. (n.d.). Environmental studies: Art and design ideas from a range of settings. Recorded in the United Kingdom. Copy on file in the Hurwitz Studio Center for Art Education at the Maryland Institute College of Art. Video documenting workshops with innovative strategies for developing observational problems using both natural materials from the environment and works of art as subject matter and/or inspiration.

Edwards, B. (1989). Drawing on the right side of the brain. Los Angeles: Tarcher. Contains a series of exercises drawn from the history of art that have proven successful with individuals across a wide age span as well as with middle school and Art I classes.


Males, F. (1981). Drawing ideas of the masters: Improve your drawings by studying the masters. Tucson, AZ: H. P Books. Includes master drawings featuring portraits, the figure, figure composition, landscape, the built environment, and animals.


OUTCOME I: DEVELOPING A REPERTOIRE OF SKILLS FOR VISUAL PERCEPTION AND ARTISTIC RESPONSE

Developing an Expanded Vocabulary for Visual Form

PRACTICE

Current practice for exploring visual-spatial form is often dominated by elements of art and principles of design. Yet historical research reveals that more is at work here than a basic vocabulary of visual qualities and principles of organization. A look at both the past and the present suggests that beliefs, values, vocabulary, and concepts have shaped, and continue to shape, the way visual-spatial forms operate, and create meaning, in art and design.

The historical development of beliefs, values, and vocabulary related to design can be viewed through metaphorical lenses (Johnson, 1992). The evolution of design terms can be understood by looking for connections with socially constructed ideas. For example, in the Renaissance, the concept of design reflected a belief in reason, human intellect, Plato’s notion of Ideas, and God. Conceptually, design was both a plan and an expression of ideal and holistic ideas. Later, design represented a phenomenon found in nature and an expression of natural forces. Nature was a noble source of beauty, harmony, happiness, and peace. Alternatively, design was thought of in terms of mechanical, orderly, and lawful operation. Eventually, the notion of analyzing visual form emerged, and with it, variations on a vocabulary to describe its principles and qualities. It became possible to think about visual form abstractly. The search for design concepts has produced numerous theories for thinking about order, structure, and form. Examples include theories of dynamic symmetry, the Divine Section, the Golden Rectangle, and mathematical models for harmonic proportion and sequence. In short, since the Renaissance, metaphors for design have included disegno/dessin, nature, ornament, order/geometry, and visual grammar and expression (pp. 148-149).

Contemporary sources provide a look forward. Roukes (1988) puts forth a theory of design based on disruptive thought. Here two disparate ideas are merged, through synec- tic thinking, to form a new idea or concept. He also looks to nature and science for new ways of thinking about structures
and theories of organization. Contemporary media including projected, animated, digital, performance, and time-based art forms require new language for describing, analyzing, and interpreting form and meaning. Certain contemporary media such as computer graphics describe visual properties in ways that may require reconsideration and qualification of existing art vocabulary (Johnson, 1996).

The physiological basis for human association of meaning to visual form provides different insights. The concept of a universal language of form is supported in theory by Gardner (1973) and Dissanayake (1988), who both recognize vectors and modes of experience that are grounded in the body and thus common to all human beings regardless of cultural experience. Dissanayake explains: “Modes are space organizing and configurational, vectors have to do with time and quality... these primordial bodily experiences—in infancy—occur before we have words—experience literally comes to us as open or closed, expanded or contracted, fast or slow, regular or irregular... later we have words and can discuss these feelings and experiences.... As well, infants react to pattern, repetition, novelty, rhythm, sequence, intensity, balance and other effects” (p. 146).

London (1989, 2002) explains that the urgency to say something important and the anticipation that the expression will be received with deep regard can result in visual form that is intuitively conceived and aesthetically realized. His notion of a holistic approach to visual form, in which the alignment of body, mind, and spirit is a formative force, is consistent with Dissanayake’s notion that human beings “make special” objects and rituals when they are seen as important.

Langer (1953) provides theoretical support for the notion of “form as feeling” and the manner in which form carries meaning. Even though some post-modernists would argue that there is no such thing as universal meaning, it may be that creating or associating meaning with visual form is a complex proposition. In part, it may be related to universal associations grounded in the body and modes of experience that are grounded in the body and thus common to all human beings regardless of cultural experience. Gardner (1973) and Dissanayake (1988), who both recognize vectors and modes of experience that are grounded in the body and thus common to all human beings regardless of cultural experience. Dissanayake explains: “Modes are space organizing and configurational, vectors have to do with time and quality... these primordial bodily experiences—in infancy—occur before we have words—experience literally comes to us as open or closed, expanded or contracted, fast or slow, regular or irregular... later we have words and can discuss these feelings and experiences.... As well, infants react to pattern, repetition, novelty, rhythm, sequence, intensity, balance and other effects” (p. 146).

In a formalist approach, visual form takes the primary focus. Attention might highlight the exploration of a certain art principle such as line and its various qualities and possibilities, or two opposite forms might be explored in an effort to know each one more fully by knowing its opposite (open versus closed, spiral versus concentric). More complex thinking might consider how various forms combine to create new forms and meaning (curved and straight, open and closed). Certain organizational principles might be practiced through problems that require students to select or respond to specific ideas (creating pattern, embellishing surface with textures) or creating forms that demonstrate an understanding of concepts (touching, separated, close-packing, vertebral, etc.).

Teacher-directed formal approaches to the study of visual form can build vocabulary and lead to concept development beginning in early childhood. Explorations of visual concepts can involve an array of different strategies, including comparing and contrasting, working with two- and three-dimensional materials, kinesthetic movement, word play, and associating form with feelings and ideas (Townley, 1978, 1983).

Formal investigations can explore the possibilities of visual form in concert with materials. It can create opportunities to consider how form communicates meaning, feeling, and ideas. Arriving at an interpretive level of understanding may depend on the level of attention invested in description, analysis, association, and interpretation.

The study of visual form and design continues to raise interesting questions. For example, is there such a thing as a universal language of form? What is the role of culture in giving meaning to visual form? Must design be a deliberate act in which principles and theories guide decisions? Is style a matter of taste while design a matter of principle? How is meaning communicated via visual form? What about visual form and design can be taught and learned? What might humans already know intuitively, without instruction, about using visual form to express ideas and feelings? What kinds of teaching practices might bring such intuitive knowledge into play?

Exploring Visual Form: A Formalist Approach

Exploring Form: An Intuitive Approach

Development of a Vocabulary for Visual Form

The vocabulary used to describe nature, art, and the constructed world has many roots and continues to develop as science and art seek to deal with new forms of matter and form. The elements of art and principles of design were identified by
Arthur Wesley Dow at Teachers College, Columbia University in 1899 as a way of helping elementary teachers talk to young children about art. He began with three art elements: line, notan (value), and color. His organizational principles included opposition, transition, subordination, repetition, and symmetry. This language was expanded by his student, Belle Boas, and has continued to evolve over a century of use. It is common practice to include among the elements of art line, value, color, shape and form, texture, and space with the principles of emphasis, movement, balance, and repetition (Stoops & Samuelson, 1983).

A similar effort to describe visual form emerged from the Bauhaus in 1919. Johannes Itten’s contrasting visual concepts for the Basic Course at the Bauhaus covered large-small; long-short; broad-narrow; thick-thin; black-white; much-little; straight-bent; pointed-blunt; horizontal-vertical; line-volume; smooth-rough; hard-soft; still-moving; light-heavy; transparent-opaque; steady-intermittent; fluid-solid; sweet-sour; strong-weak. Others such as Paul Klee and Vassily Kandinsky used concepts of point, line, and plane to further discuss the dynamics of visual form and space.

Concepts from nature, the substructure of design, and systems analysis provide additional terms such as spiral, explosion, vertebraic, radiating, cluster, branching, grid, lattice, interlocking, stress and flow, close packing, and open packing (Roukes, 1988, p. 77).

Contemporary forms of art and new digital technology require new terminology in order to deal with concepts such as hierarchy, scale, interactivity, (a)synchronicity, layering, systems, replication, synthesis, modularity, color, light, sequence, time, and sound (Schooeler, 2000). Thus, rather than a short list of elements and principles, sometimes regarded as “the rules for art,” the vocabulary and the conceptual basis for visual form evolve from developments in science, technology, and art, providing rich concepts for visual exploration.

**Suggestions Drawn from Research and Reports from Practice**

Concepts and language for design and visual form are best thought of as evolutionary and fluid. Thus expansion of the concepts and vocabulary beyond traditional principles and elements is essential (Johnson, 1992; Johnson, 1996).

Visual beauty has value (Johnson, 1992). Making something that is well planned and elegantly shaped is an aesthetic goal worth pursuing.

Nature is a source of ideal order and form (Johnson, 1992). Studying form and structure in nature, natural objects, and science cultivates a sense of wonder, and regard for the natural world has tremendous value.

Principles that have guided specific design efforts can be discovered or deduced through analysis (Johnson, 1992). Formal exercises and formal analysis can serve the purpose of connecting what is perceived with what is felt and inferred.

Visual concepts can be taught and learned. Even young children can learn a relatively sophisticated set of visual concepts if the concepts are presented as contrasting opposites and explored through multisensory activities and appropriate media (Townley, 1978; Eisenstein, 1995; Carroll, 2001).

Science and technology offer new concepts and vocabulary for understanding visual-spatial form (Roukes, 1988). Challenging students to visualize and to find ways to represent new scientific theories may lead to new possibilities for creating visual-spatial and time-based forms and structures.

Contemporary art and media may require new or qualify old terminology used to describe visual-spatial form. Traditional terms and visual features from computer graphics should be reassessed as they are integrated into art education. Computer technology may serve as a useful model for design theory in traditional art media (Johnson, 1996).

Intuitive approaches to image making might be integrated with or even supplant more formal approaches to the study of design and visual form (London, 1989). See the entry under holistic approaches for more information.

Traditional design problems, if revised using strategies that create the conditions for making personal choices and working intuitively as well as formally, can have more meaning for students (McKenna, in press).

Complementary use of formal and informal approaches to the same visual concepts may offer students with different learning styles multiple ways to understand the relationship between meaning and visual form (La Perriere, 2002).
REFERENCES


Dissanayake searches for the origins of art in human behavior and proposes a style of thinking about art as a way of making special those objects and rituals which have profound importance to their makers.


RESEARCH STUDIES


Eisenstein, M. (1995). The effects of multi-sensory art education on the young learner. Unpublished Master’s Thesis, Towson University. A participant-observer comparing two different treatments. The enhanced vocabulary and multiple modalities were found to positively affect artform and learning. Teams of kindergarten and art teachers in three Maryland school districts validated the Another Look curriculum of visual concepts and themes as being developmentally appropriate for kindergarten children. Both qualitative and quantitative data support this conclusion.


Study includes identification and analysis of more than 1,000 terms. Suggests that the formalist concepts about the elements and principles of design in art education must be expanded or replaced to include new terminology and concepts about visual properties of images.


Historical analysis of the evolution of the concept of design guided by selected metaphors. It presents a typical survey of various concepts of design that have prevailed at different times and places in Western culture.

MODELS FOR PRACTICE


Edwards has designed an exercise in analog drawing designed to uncover common interpretations to different kinds of visual form. Conducted with a class, the exercise can prompt a discussion about the feeling or meaning embedded in abstract form and stimulate discussion about universal associations of feeling and meaning with visual form.


Itten recounts the Basic Course he designed for the Bauhaus. The book includes examples of student work from a wide variety of assignments. Many of these problems and exercises are still valid today.


Herman introduces terminology in terms of contrasting opposites, consistent with Itten’s and Townley’s approaches to visual form, and many of the terms apply to both visual form and dance/movement.


La Perriere presents an example of two ways to approach the concept of symmetry. Two assignments were pursued at relatively the same time. In one, teachers asked students to design a “personal portable altar,” an assignment that would likely lead to the intuitive use of symmetry. At the same time, students engaged in formal problems exploring symmetrical design. An informal, intuitive approach alongside a formal approach ultimately reinforces the association of form with feeling and meaning while accommodating different preferences for learning and expression.


Following a philosophical orientation to an intuitive way of working, London proposes 12 different questions or prompts useful in generating responses with found materials and art media.


Further explorations based on a holistic approach to making art in which visual form emerges from an intuitive rather than a formal intellectual approach.


Here McKenna reports a holistic approach that transforms “an ordinary color and mood” exercise into a more personally meaningful experience by simulating an extraordinary context and creating conditions for self-referential choices that are ultimately reflected in color studies.


Chapters have short explanations of theory and concept followed by well-illustrated sections on studio practice. The book is loaded with ideas for teaching and offers a mix of work by artists and students.

Schooler, E. (2000). Expanding the vocabulary for art. Presentation for the course “The College Teaching of Art” at the Maryland Institute College of Art. Presentation suggests that contemporary art and media are constantly expanding the vocabulary for art.


Resource book that addresses perception and imagination, visual vocabulary, design process, and design influences. Illustrated with examples by designers and includes brief biographies on leading designers in different fields.


Townley’s curriculum for young children is somewhat similar to Itten’s contrasting visual concepts and includes open-closed, straight-curved, separated-touching, parallel-branching, smooth-rough, horizontal-vertical-diagonal, spiral-concentric, exploding-enclosing. Roukes (1988) includes spiral, explosion, vertebral, radiating, cluster, branching, grid, lattice, interlocking, stress and flow, close packing, and open packing as visual analogues drawn from “systems from nature.” Townley provides models for word association as well as sensory and kinesthetic explorations that can help young children make connections linking visual form, feeling, and meaning.


Illustrated article showing children acting out visual forms, along with examples of their drawings and a description of the activities used in teaching the Another Look curriculum.
OUTCOME I: DEVELOPING A REPERTOIRE OF SKILLS FOR VISUAL PERCEPTION AND ARTISTIC RESPONSE

Expanding the Repertoire for Visual Perception and Artistic Response

BETTER PRACTICE

Teachers who foster development of a repertoire of representational skills prepare students to make expressive and responsive choices to serve their needs and interests.

THEORY

A repertoire of representational skills might include a number of ways to express ideas visually, spatially, and in time-based media. Research suggests that young people may, on their own or with the help of instruction, use multiple representational languages simultaneously (Duncum, 1997; Carroll, 1994). The repertoire can expand to encompass a variety of strategies. As well, distinct skills within the repertoire can be advanced. The curricular challenge becomes one of constructing sequences that develop, over time, several modes of representation while also taking advantage of certain developmental opportunities along the way. Empowering students with sufficient skill and understanding prepares them to choose among representational forms as it serves their thoughts, feelings, ideas, questions, and concerns.
**Practise**

*Simultaneous Development of Different Representational Skills*

Previous entries in this section have focused on working from observation, memory, and experience as well as employing narrative techniques and exploring visual form. While some may have concluded that any given stage of drawing development delimits representation to that one style, examples from practice demonstrate otherwise. For example, elementary-age children, beginning in kindergarten, can work from observation even though they are primarily schematic drawers (Smith et al., 1998). Sequences of different strategies make clear the difference a drawing strategy can make (Carroll, 1999; Gordon, 1987). Adolescents still enjoy working in a narrative style even though they draw more realistically (Toku, 2001). At some point, these representational skills may cross over, feed each other, and combine to make new and personal styles of representation (Carroll, 1994).

**Broadening the Repertoire**

Students encounter a lot of information that they might consider and present visually and artistically. Additional modes might incorporate ways to think about and record ideas through visual note taking, visual systems for organizing information, planning processes, and displaying data, and use of symbols, metaphors, photographs, models, three-dimensional forms, and time-based media (Hamilton, 1998; Katz, 1997; Tufte, 1990, 1997, 2000).

*Expanding Modes of Representation Beyond Two Dimensions*

Modes of representation apply to three-dimensional as well as two-dimensional forms. It appears that alternating between two and three dimensions allows insights gained from one to inform the other. Further, some individual learners, or even whole groups of students, will struggle with two-dimensional forms of representation yet gravitate to and even excel with three-dimensional forms. In such cases, beginning with three-dimensional strengths may make two-dimensional representation possible later. Opportunities for students to explore time-based and performance options may also be valuable.

*Introducing Styles for Greater Expressive Possibilities*

Students can explore expressive qualities as well as more symbolic, metaphoric, abstract, and conceptual modes of thought and expression (Edwards, 1986; Szekely, 1989a, 1989b; Roux, 1988; Ruopp, 1998, 2001). While investigations of style commonly serve to loosen up and explore expressive possibilities, styles are not simply visual solutions (Feldman, 1981). They are the product of ideas, interests, conceptual and contextual developments, historical events, social conditions, and the like. Stylistic conventions presented in context reinforce the notion that images reflect ways of thinking as well as innovations in representation.

*Recognizing Developmental Readiness for More Advanced Challenges and Skills*

In addition, there are “windows of opportunity” to develop specific expressive options. For example, narrative techniques grant schematic drawers a bridge to more animated and flexible systems for drawing (Olson, 1992). While the narrative impulse is strong, it makes sense to give students instruction that helps them tell their stories in exciting ways. Certainly, students can portray richer ideas if they develop ways to show action and expression; employ points of view and special effects; create settings with time of day, climate, and terrain; and use formats that accommodate visual storytelling.

Another window of opportunity occurs in the upper-elementary grades when learners seek to show more detail and make their drawings look more real and right (Burton, 1980). The “adolescent crisis” in representation requires attention. It signals readiness as well as the need to develop further those skills that make a convincing likeness possible (Ayres, 1998). Once adolescents have affirmed their confidence in their artistic ability, they may find that symbolic, abstract, and conceptual modes of representation better serve more complex ideas and feelings and their developing ability to think about ambiguity.

*Finessing Representational Skill*

Sustained practice over time serves to bring skills to higher levels of mastery (Kay, 2000). Practice not just for the sake of practice but practice with a purpose can help develop skills as well as capacity to handle increasingly sophisticated subject matter. Constructing practice that continually pushes toward new levels of confidence with materials, subject matter, and scale is especially useful. Developmental curricula that span a number of years can move students toward personal aesthetic preferences, control of media, and greater expressiveness (Popp, 1997). Exposure to art, studies from master artists, keeping sketchbooks for daily practice, and working in series appear to be productive strategies (Grauer & Sandell, 2001).

*Employing Modes of Perception and Response that Foster Personal Response*

Certain modes of response or approaches are particularly useful if they foster both perceptual awareness and artistic response. For example, naturalistic painting provides such a vehicle because it emphasizes perception and response. While teaching
Empowering students with sufficient skill and understanding prepares them to choose among representational forms as it serves their thoughts, feelings, ideas, questions, and concerns.

students how to think through paint, it simultaneously develops their perceptual skills and activates personal response. In this case, an approach based on style is less an end in itself than a beginning (Karnes, 2000; McDaniel, 1992).

Problems that call for metaphoric, symbolic, or thematic solutions often awaken more intuitive thought and processes for working (Asher, 2000; James, 2000). If a problem is sufficiently elegant, students will work to master representational skills in order to say something important. (See the entry on “Shaping Elegant Problems” in Section III.)

Holistic methods may also unearth more intuitive and spontaneous work (London, 2003; Peterson, 2002). (See the entries on “Holistic Approaches,” “Drawing on Imagination, Memory, and Experience,” and “Developing a Vocabulary for Visual Form.”)

Because personal style arises, in part, from inherent qualities and preferences, efforts might be made to preserve and honor those from the beginning. If formal training appears to diminish personal style, periodic efforts might apply newfound skills to problems that invite personal choices. When students need a fresh approach, revisiting the origins and course of their artistic development may unearth new ideas, spark authentic work, or reconnect them with themes and/or visual problems they found intriguing at earlier stages (Kay, 2000).

Recommended Strategies

Incorporate opportunities to work from imagination, memory, and experience, narratively and from observation, into the curriculum beginning in kindergarten. Periodically revisit each representational strategy, introducing developmentally appropriate conventions, techniques, media, and expressive possibilities. Introduce work by children and adult artists that employs representational strategies just ahead of conventions students have mastered.

Examine the curriculum and other interests of students to identify ideas, information, and concepts that might figure visually in art. Introduce strategies that will accommodate visual thinking and representation. Involve students in determining subject matter, orchestrating installations in the art room, and/or searching school, home, and community environments for subject matter and content.

Develop a balanced program of two- and three-dimensional investigations; consider the possibility of processing concepts in both as well as developing imaginative, narrative, realistic, and metaphoric skills with three-dimensional and time-based media.
Offer young students the opportunity to group works by style. Have older students find commonalities and differences in pieces by artists working in different styles. Develop a vocabulary for identifying styles. Draw from art to experiment with and explore different expressive styles. Shape art problems so that they invite students to combine and apply representational skills in new and inventive ways.

Offer developmentally appropriate information to create a larger context for and understanding of how and why different styles developed. Encourage investigation of individual artists whose work has gone through a number of stylistic changes.

Invite students to share work done at home. Evaluate work with an eye for signs of readiness to take on bigger challenges. Survey students to find out what they are interested in learning. Offer students choices in how they solve representational problems. Observe what choices they make and how they express the challenges representation poses to them. Defuse the myth of talent by reinforcing the notion that representational strategies can be taught and learned.

Use structured exercises to guide practice in purposeful ways. Attend to qualitative issues that make a difference. Expose students to master works, model representational skills, and explain thought processes involved. Encourage daily work in sketchbooks, thematic investigations, and concentrated effort. Use work of advanced students to demonstrate, and verify, that artistic growth and development are attainable. Assign homework that requires students to work in different settings and at different times of the day.

Use in-depth explorations in a given style, such as a naturalistic approach to painting, that lead out to personal style because they develop ways of thinking visually about perception and response. Use more intuitive and holistic encounters to refresh and reconnect students with deeper personal sources for imagery and reasons for engaging in art making.
OUTCOME 1: DEVELOPING A REPERTOIRE OF SKILLS FOR VISUAL PERCEPTION AND ARTISTIC RESPONSE

REFERENCES


Edwards, B. (1986). Drawing on the artist within. New York: Simon and Schuster. Contains analog drawing exercises designed to explore the possibilities of a universal language of form. In this exercise, feelings are portrayed abstractly without symbols or subject matter and compared to find commonalities and differences.

Feldman, E. (1981). Varieties of visual experience (2nd Ed.). Englewood Cliffs, NJ: Prentice-Hall. Feldman offers an alternative to a chronological approach to art history. Four styles and several themes organize works into groups for study. The style of objective accuracy refers to realism and the goal of describing subject matter faithfully. The style of emotionalism refers to changes that enhance, heighten, distort, and/or accentuate aspects of the image to achieve a higher degree of emotional statement. The style of fantasy depends on a degree of realism to be convincing and a degree of the fantastic to take the image into the world of imagination. The style of formal order primarily gives visual qualities primacy over objective accuracy.


London, P. (1989). No more secondhand art: Drawing on the artist within. Boston: Shambala. Twelve encounters, as tested with mostly adult groups ranging from novices to professional artists, provide models for constructing approaches to image making that are holistic in nature. Alignment of the mind, body, and spirit is essential to this process.


Olson, J. (1992). Envisioning writing: Toward an integration of drawing and writing. Portsmouth, NH: Heinemann Press. Author offers a pedagogical model for developing narrative techniques. Strategies from Olson’s model have proven successful with students from elementary school through professional art school.


Smith, N., and the Observation Study Group. (1998). Observation drawing with children. New York: Teachers College Press. Examples of observational drawing from kindergarten to Grade 6 provide evidence that children who are primarily schematic drawers or in the stage of dawning realism, when they work from memory, are capable of drawing from a wide range of subject matter.


FURTHER RESEARCH

Ayers, J. (1998). Unpublished master’s thesis: Drawing as a way of knowing: Developing visual thinking skills in the adolescent learner. Towson University. This study suggests that middle school is a prime time for developing observational skills. Students want to draw convincing likenesses of people, animals, and other subject matter of interest to them.


REPORTS FROM PRACTICE

Asher, R. (2000). The Bronx as art: Exploring the urban environment. Art Education, 53 (4), 33-38. Article describes a thematic investigation of urban environment orchestrated with 10th-grade students in an alternative high school for students with problems. Strategies covered sketching on site, keeping journals, writing, observing a visiting local artist paint, looking at work by artists who used the urban environment as subject matter, recalling places they had lived, sharing experiences, and creating artworks. Collectively, these strategies gave students a more positive way of looking at and experiencing their environment while creating works that were exhibited in the community.

Burton, J. (1980, December). Representing experience from imagination and observation. School Arts, pp. 26-30. This article addresses upper-elementary students’ need to produce drawings that look real and right and discusses approaches to drawing from observation and imagination.

has demonstrated that learners from elementary school on can use a variety of representational strategies to solve, in this case, the problem of creating characters for a parade. Each strategy accommodated different ideas and qualities.


Presentation featured visual journals by high school students and teacher preparation candidates. These journals documented an exploration of media and ideas.


Examples of drawings by an 11-year-old drawing the figure from verbal description (memory), observation of a live model and then a skeleton, and a whole figure self-portrait indicate that representation depends on the strategy employed.


A reflective examination of the evolution of an assignment over the course of three years. Designed for college-level academically underprepared students, a photomontage assignment yielded increasingly richer work under instruction that incorporated flexible but focused constraints; personal, social, and artistic relevance; practice with creative and metaphorical concepts and practices; expectations of complexity, ambiguity, and depth of meaning; and expressive and reflective writing.

Karnes, M. (2000). Naturalistic painting: Approaches to landscape and figure. Presentations for graduate students at the Maryland Institute College of Art. The style of naturalistic painting was presented as a way of heightening perceptive skills in concert with structured practice in painting.


Article both validates and illustrates how visual note taking can serve learners in all their subjects.


Session illustrated individual progress of students as they came to understand the naturalistic painting model and how they later diverged from it. Evidence suggests that such a model for painting provides a process for self-actualization and dramatic success.


Discussion of dreams or “mind-movies” as inspiration for artwork. Peterson lays out strategies for generating ideas from dreams, such as dream diaries, making connections to psychology, staging dreamlike images for documentation, and studying the role of dreams in other cultures. Examples of student artwork are included.


A four-year sequence of self-portrait assignments, illustrated by portfolios of student work, suggesting that revisiting the same theme, specifically the self-portrait, over the course of four years yields visual evidence of artistic growth. Developmentally, the work revealed gains in representational skills, expressive power, and conceptual thinking as the years progressed.


A sixth-grade unit designed to help students find ideas for textures, shapes, and value in their surrounding environment and discover that these sources offer rich visual source material for making art. Strategies cover thumbnail studies from observation concentrating on shape, line, texture, and value; use of the analogy of building a house for constructing a composition; observation drawings from outdoors; an introduction to abstract artists; and enlargement, using a viewfinder, of a portion of a realistic image creating an abstract image; development of large-scale drawings, and discussions with peers.


Article describes a middle school unit in which students create large-scale portraits using expressive color following reflective questions and an introduction to ideas and feelings associated with color.


A series of two articles offering suggestions for making drawing with children an imaginative event. Makes the case that children are always discovering new drawing materials and that sensory engagement with the drawing process leads to invention. Helping children “invent” can include preparing to draw in a number of imaginative ways, searching for line-making tools, drawing machines, drawing surfaces, trying out different physical positions and postures, experimenting with gripping tools, and other ideas.


Article presents information on the Japanese movement among young artists to produce manga or narrative comic books that suggests adolescents are very interested in narrative forms of expression.


These sources illustrate how displaying complex information visually can reveal multiple dimensions. For example, data about an event might be visually presented to reveal movement through time and space showing magnitude. The author, who is a designer and sculptor, argues that visual presentation of multidimensional evidence is needed in order to understand complex phenomena in any field of study.
Reflecting on Perceiving and Responding Visually

**Practice**

Burton (1980) illustrates the value of asking young children to pause and reflect on the marks they have made. In calling attention to choices made and through questions, a dialogue begins between the maker and the work. The processes of perceiving and responding mix intuitive and conscious thought, intent and accident, deliberate and spontaneous interaction with materials. Taking time to consider what has resulted and how it has come about offers opportunities to consider the nature of perception, response, and visual modes of thinking. Different modes of representation involve different thought processes. Each strategy requires different kinds of visualization and focuses attention in different ways. For example, pre-visualization using suggestive prompts or descriptive language helps form an image in the mind’s eye prior to working, while observational drawing involves an exploratory search for contours, shapes, relationships, and details. It follows that the work from different strategies of thought and representation may also have distinguishing visual characteristics. An image pre-visualized may distill significant visual information while a work from observation might capture more about form, structure, and detail.

Recognizing different strategies—the way they work, how they focus one’s attention, and the manner in which they can be combined—makes students aware of their developing repertoire of representational options. Identifying purposes served by distinct strategies further informs students as they choose ways to engage with representational strategies. For instance, working from memory stimulates recall and a distillation of experience whereas working from observation provides a process for knowing something by perceiving and responding to it. Importantly, different representational strategies produce different challenges, pleasures, and discoveries.

Reflective thinking is a catalyst for growth because it stimulates reassessment and synthesis. It can also be cultivated as a habit of mind by incorporating it into a total process for growth and learning (Unrath, 2002).

Recommended strategies drawn from Burton (1980) and Taunton (1984):

Invite students to pause and reflect as they are working. Help

**Theory**

Arnheim (1983) identifies perceiving, thinking, and forming as three aspects of a productive mind. They work together, and to train one of them, one always has to train all three. “There is no perceiving without thinking and forming, and no forming without perceiving and thinking” (p. 10). Representational strategies, such as working from observation, memory, experience, story, and imagination, all involve these three aspects in profound ways. Forming meaning visually also involves these aspects of mind. Yet, unless teachers call these strategies to the students’ attention, learners may not realize how mind-expanding these engagements can be.
Taking time to consider what has resulted and how it has come about offers opportunities to consider the nature of perception, response, and visual modes of thinking.

develop an awareness of choices, actions, thoughts, developments, and possibilities by paying attention, asking questions, honoring effort, acknowledging choices, and encouraging reflection. Ask students to describe their work, identify choices, and to make associations with ideas and feelings.

Make reflection a regular and natural part of the process of representation. Encourage conscious recognition of thought processes and choices that may result from a curious mix of intuition, memory, distillation, observation, inclusion, omission, emphasis, intent, accident, discovery, problem solving, and creative thinking.

Ask students to consider the purpose(s) served by different modes of thought and representation. Ask them to talk about what they thought and discovered through envisioning, perceiving, and/or responding.

REFERENCES

Arnheim, R. (1983). Perceiving, thinking, forming. Art Education, 36 (2), 9-11. Arnheim identifies perceiving, thinking, and forming as fundamental aspects of productive minds, and suggests that among the highest purposes of art and art education is the unfolding of life’s productive potentialities and insights that can be expressed and understood through the logic of vision.


Dorn, C. (1999). Mind in art: Cognitive foundations in art education. Mahwah, NJ: Lawrence Erlbaum. An exploration of art as intellect and the cognitive processes involved in learning, art, and concept formation. Includes a section on “Conceptual Thinking in Art” illustrated with examples drawn from artists who work in different ways, i.e., abstractly, realistically, and in response to mass media, advertising, and popular culture. Suggests that the creative act of image formation involves conceptual behaviors including discovery and manipulation of perceptual data, acts of awareness, and a variety of mental actions.

RESEARCH


The data base and focus for this study included 70 National Board-certified art teachers. Among its findings was the observation that reflective thinking, as stimulated by a structured, critical portfolio assessment process, was both the catalyst and the consequence of the process.

MODELS FOR PRACTICE

Burton, J. (1980, September) Beginnings of artistic language. School Arts, pp. 7-12. Provides example of a dialogue with a young child engaged in drawing, identifies the rudiments of artistic language, and suggests teachers cause students to pause and reflect on their work. Concludes with a model for engaging students in such a reflective dialogue.

Szekely, G. (1988). Teaching students to understand their art work. Art Education, 38 (5), 38-43. Suggests that the aim should always be to help students learn to evaluate their own work rather than to have others provide final assessments. Offers a variety of strategies for helping children revisit, even reconstruct, their artwork as a way of learning from it.

Taunton, M. (1984). Reflective dialogue in the art classroom: Focusing on the art process. Art Education, 37 (1), 15-16. Article lists goals for questioning during the art process and examples of questions. Goals include inviting consideration of visual qualities of the media, choices, sources of ideas, development of art ideas, other artists’ intentions and efforts, discoveries made in the process of working, what resulted, and why. Reinforces the idea that much of the educational significance of art making comes from the events of making rather than only in the final product.
OUTCOME II

Facilitating Investigations into Historical, Cultural, and Social Contexts

Constructing Art Historical Context
Studying Objects and Material Culture
Examining Visual Culture
Making Interdisciplinary Connections
Creating Art in Response to Contemporary Issues and Concerns
Constructing Art Historical Context

**THEORY**
Referencing studio work to examples from art history and contemporary art is more common than direct instruction in which students learn to think as art historians (Galbraith & Spomer, 1986). Erickson (1995) suggests that art historical understanding requires “the ability to imagine oneself out of the present and in the past or in another culture” (p. 25). Her research studies with second-, fourth-, sixth-, and eighth-grade students further suggest that developmental, instructional, and content-specific issues all affect how successful students will be in demonstrating art historical understanding (Erickson, 1995a, 1995b, 1998).

Parsons (1987) proposed that an understanding of art progresses in a sequential manner wherein viewers are first able to think about the artist and the artist’s motives for creating the work. Later, viewers are able to consider art from other perspectives including the people who experienced the art when it was made, the culture within which it existed, and culturally conditioned responses. Erickson’s (1995a, 1995b, 1998) research offers some support for a developmental framework in which older, more mature students grasp more than younger children. Her findings suggest that instructional approach also plays a strong role, as do the specific works chosen for study.

**PRACTICE**
Teaching students not only what art historians have concluded but how art historical conclusions have been reached actively engages students in a range of thinking processes including the establishment of facts, interpretations of meaning, and explanations of change.

Among the processes for establishing facts, three hold particular significance for art education: reconstruction, description, and attribution. Reconstruction of an artwork verifies if the object is unaltered or, if it is, how it looked in its original state. Description is a verbal report of observable facts that...
can be verified by standard measures, ordinary experience, and a vocabulary of formal terms. Students should be able to point to or measure descriptive facts. Attribution is the establishment of artist, date, culture, technique, and function. Such evidence comes from sources outside the artwork itself.

Historical interpretation normally determines an artwork’s meaning within the context of the era when it was created. Both evidence from the work itself and outside sources are needed for historical interpretation. Some works take on a life of their own acquiring new meanings as they are set within different contexts, becoming symbolic or associated with different ideas, doctrines, or movements, or the work is recontextualized, giving it new meanings.

Change over time can be explained in different ways. Narrative accounts take into consideration influences, traditions, and innovations reflected in the artwork. Explanations can also be scientific accounts that identify principles that cause change.

Erickson (1995b) used the following questions to assess the level of art historical understanding following the study of reproductions and contextual information:

- Why do you think the artist made the artwork look the way it does?
- Why do you think the viewer back then wanted to look at the artwork?
- What does this artwork tell you about what people generally thought or believed back then?

Choosing artworks for investigation may take into account a number of considerations:

- Which works are likely to be developmentally appropriate for students in terms of content, theme, and style of representation?
- Which works might have personal or cultural relevance for individuals or groups of students?
- Which works are familiar yet not sufficiently explored?
- Which works are interesting enough to capture students’ attention yet sufficiently problematic to raise questions and challenge assumptions?
- Which works reveal insights into an era, events, lives of artists, the creative process, or the relationship between history and art or social issues and art?
- Which works have local, state, regional, national, and/or international presence and should be better known by students?
- Which works have an interesting history with primary source material students can access through research?
- Which works might have relevance to other art content, issues, or inquiry in other content areas that would make them likely candidates for investigation?
- Which themes might highlight certain ideas about art from the past and the present that would help organize works for study?

**Recommended Strategies**

Group works around a theme that directs attention to an era, culture, beliefs, and values. Examples include: Art before History, Art of the First Cities, Where We Fit in the World, Art and Religion, When Cultures Meet, The Art of Powerful Families, Art and Revolution, Art and Technology, Art and the Individual, and Art and the Global Village (Erickson, 1995b).

Actively engage students in the process of constructing contextual information. Use guiding questions to mediate the search for information and verbal strategies such as creating titles for works under study (Koroscik, Osman, & DeSouza, 1988).

Have students use both visual and verbal strategies for encoding the structure (or formal qualities) and its meanings (or semantic characteristics) (Koroscik, Desmond, & Brandon, 1988).

Encourage different kinds of research including books, Web searches, museum visits, consulting books, and investigation of museum collections.

Where possible, have students find preliminary source material, previous works, and/or studies that figured into the process of developing the work.

Encourage the development of descriptive language and attention to relationships within the work. Require that interpretations be somehow grounded in the work.

Use a combination of modalities to study and make presentations on works under study. Consider such possibilities as creating a model of an artist’s studio containing the works (Gaither, n.d.), costumed re-creations of works, mock interviews with the artist, news reports, and other creative forms of reportage such as an exhibit with text, a booklet for viewers, an illustrated presentation, or a Web page.
OUTCOME II: FACILITATING INVESTIGATIONS INTO HISTORICAL, CULTURAL, AND SOCIAL CONTEXTS

R E F E R E N C E S

This paper examines the various ways art history can be relevant to university art students, art teachers, and art educators.

Erickson lists five benefits art history has for aesthetic education: students set their own interests aside and reflect consciously on the object or event; they need not form aesthetic judgments; they exercise their imagination; they focus on the particularly (rather than the generality) of the situation; and they find that history thrives on change.

A survey of 104 secondary art teachers suggests that more than a majority of teachers introduce art history informally within the context of a studio experience while some teach art history on a frequent basis, and even fewer teach it as a separate course.

R E S E A R C H

A case study with 19 third graders to see how they construct cultural understanding. Given the small size of the data base, findings are qualified yet may suggest that developmental as well as pedagogical issues affect the meanings children can construct.

Article describes a qualitative study that used four questions to check for understanding drawn from the study of reproductions supported by text information. Findings both confirm and raise questions about Parsons’s stage theory for understanding art.

Article describes an experimental correlational study that compares art historical understanding developmentally and in relation to specific instructional approaches and choices of work for study. Findings confirm that both second- and sixth-grade students demonstrate increased understanding from the artist’s point of view with art historical instruction. However, their capacity to refer to historical evidence was affected by other factors including developmental issues and content-specific choices of works under study.

Article describes a subsequent study comparing older students’ demonstration of art historical understanding resulting from instruction in art history. Findings confirm that both grade levels are capable of some contextual interpretation. The higher scores of eighth-grade students may reflect “more extensive prior knowledge, more developed cognitive abilities, or more mature social development, as well as the effects of instruction” (p. 315).

Study suggests the value of providing students contextual information to use as interpretive cues in forming art understanding. Notes that in the absence of contextual information, students have only their own existing knowledge from which to draw inferences.
which students are likely to know little and ask them to respond as artists, as
viewers, and as members of today’s culture. The teacher might then present
information about the historical artist, viewer, and culture and ask students to link
that information to an historical interpretation of the artwork. Students might then
compare their first interpretations to their later interpretations” (p. 25).

Gaither, J. (n.d.). Student work. Three-dimensional small-scale models depict-
ing a studio including miniatures of works from the artist’s repertoire of images.

Education, 42 (3), 197-213.
Article argues that the picture storybook is well suited to introduce children to
the world of art. Identifies four categories of picture books: 1) books that refer
to specific works through parody; 2) fictional books about well-known artists; 3)
books set in and concerned with museum experiences; and 4) books that imi-
tate or draw on identifiable artistic styles or historical schools of art. Article
discusses examples of books in print and lists references.

Arts, pp. 43-44.

Article describes a game-based strategy that requires teams to carry out initial
research on the history of art and to subsequently bring their efforts together to
produce visual evidence of shared information in the form of a mural. The
strategy organizes teams using four metaphorical categories: the way of the
world, the way of the intellect, the way of emotion, and the way of the spirit.
These metaphors appear to have helped students access difficult concepts and
discover a new way of thinking about art history.
OUTCOME II: FACILITATING INVESTIGATIONS INTO HISTORICAL, CULTURAL, AND SOCIAL CONTEXTS

STUDYING OBJECTS AND MATERIAL CULTURE

THEORY

Human beings have a long history of making important objects and rituals special. In making them special, values and beliefs of a society, group, or individual are made visible, suggested, declared, and/or reaffirmed. In addition, special objects and rituals present evidence of resources, resourcefulness, creativity, skills, roles of the craftsperson and artist, technology, symbol systems, and lifestyle (Dissanayake, 1988, 1991, 1992).

Culture is a socially constructed conception of reality. It is concerned with how things are, how things are done, and how the world is for people living in that particular societal or ethnic group (Wasson et al., 1990). Further, the processes of enculturation and socialization are shared, adaptive, and dynamic. Cultures are constantly in the process of remaking themselves through social and political changes.

Anthropology is the umbrella over both archaeology and ethnology. Each of these fields employs similar yet distinct investigative strategies and goals.

Anthropologists design a model for thinking objectively, creatively, and contextually about objects and what might be inferred from them. They ascertain different kinds of information as well as specific details based on the study of objects from material culture. They analyze both the artifact and the maker, form and function, elaboration and wear, origin and mobility, tradition and change. Subsequently, they can identify commonalities and differences across cultures as well as ideas about how individual cultures, groups, and individuals embed values and beliefs in their objects and rituals. They can also consider how objects, ideas, styles, innovations, and technologies were transported or replanted, or how they developed, evolved, vanished, or were resurrected. They may compare objects to determine where, how, and by whom they were made. They may study different kinds of historical records to determine how objects were used and influences that resulted in change or innovation in form, style, technique, and/or process. In addition, they may investigate iconography, symbol systems, and language.

BETTER PRACTICE

Teachers who engage students in the study of objects and material culture help their students develop thinking skills anthropologists use in forming ideas about cultures from the past and the present.
Anthropologists also delve into other contextual factors that affect the development of material culture such as availability of raw materials and technology, economic factors, living patterns, kinships, belief systems, political events, and commodification. A topic of special interest may be used to focus their inquiry.

Archaeologists provide a model for inquiry that attends to the discovery, location, and context of objects and human remains. They use skills that involve research, physical labor, documentation, and reconstruction as well as scientific and artistic methods including photography and drawing to record location, arrangement of objects as found, nature of raw material, and design of form and detail. Deductive reasoning and imagination play a role in reconstructing a whole image for individual objects or sets that have missing parts, have been altered, or are found in pieces. Archaeologists study relationships between objects, within a group, and among societies to understand the movement of peoples in time and place along with the culture as revealed in its objects and remains.

Ethnographers study description and thus collect information rich with detail. They gather information through interviews, questionnaires, group discussions, individual reflections, writings, reportage, and documentation—visual and otherwise. They are interested in experience as relationally constituted and have developed processes of inquiry and representation that are useful in investigating culture, including the politics of representation. They have particular interest in the acknowledgment of, and critique of, uneven power relationships (Desai, 2002).

Comparison of similar objects drawn from material culture and representing different eras, peoples, ecology, environment, and history provides ways of thinking about similarities and differences among societies, groups, and individuals.
PRACTICE

Recommended Strategies

Examination of everyday objects can reveal a great deal about the values and beliefs, resources, technology, attitudes, skills, and resources of a society, group, or individual (Chapman, 1978).

Comparison of similar objects drawn from material culture and representing different eras, peoples, ecology, environment, and history provides ways of thinking about similarities and differences among societies, groups, and individuals. Including contemporary examples as well as objects from the past invites consideration of present values and beliefs along with those from the past (Chapman, 1978).

Different metaphors can be useful in examining the same body of work from multiple points of view in that they direct attention to certain aspects, assumptions, and questions. For example, thinking about art, metaphorically, as entertainment, wealth, volume, antiquity, superlative, and technique allows a host of different issues and responses to come to the surface (Foss & Radich, 1984).

Focus on a culture chosen for its relevance to the community where students live. Devote time, over years, to getting to know the context, including history, language, stories, spirituality, and life experiences of objects and cultures (Garber, 1995).

Simulate an anthropological dig by burying fake but prototypical, broken objects. Have students work in teams as archaeologists to map the area and slowly uncover the object documenting location of parts to show measurements, orientation, and location on site maps drawn to scale. Create a visual record of all parts with detailed drawings. Have students reconstruct the objects and analyze form and symbols, speculating on function and meaning. Such found objects may then function as prototypes inspiring student work, which can then be displayed in a museum-like setting along with the original finds (McCarthy, 1998; Munday, in progress).

Study contemporary objects by considering various contextual avenues. For example, the study of contemporary ceramic works identified eight avenues. They include: Cultural/Historical Foundations, Function, Philosophical Issues, Visual Qualities, Art World Connections, Production Conditions, Technical Components, and Sociological/ Ideological Issues (Sessions, 1998).
Ethnography and notes its increasing popularity in art education. Provides specific examples of contemporary artwork that draws on cultural anthropologists, objects can be thought of as signs of group membership and individuality, as representing beliefs and values, or reflecting creative and/or technical possibilities of materials.


Ethnography is defined as a process of inquiry and a written representation of cultural anthropologists. Objects can be thought of as signs of group membership and individuality, as representing beliefs and values, or reflecting creative and/or technical possibilities of materials.

Dissanayake, E. (1988). *What is art for?* Seattle: Washington University Press. Sets forth the argument that the arts evolved as human behaviors, are related to a number of human propensities, and served to help early humans survive.


Examining Visual Culture

**THEORY**

Art educators including June King McFee and Vincent Lanier have advocated exploring the larger world of visual culture beyond masterworks and cultural artifacts. For example, they have long endorsed the study of mass media, advertising, propaganda, film, and television. Several factors appear to make the study of mass culture even more critical for today’s students. Specifically, the cultural environment is not only increasingly visual; it is multisensory in nature, layered in its meanings, and open to multiple interpretations (Chapman, 2000; Duncum, 2002). Further, it is often driven by the marketplace, loaded with stereotypical imagery, and powerfully seductive in its delivery of implicit and explicit messages. It also yields conflicting and mixed messages about the values, attitudes, and beliefs society holds about issues such as violence, sex, physical image, consumerism, status, and power (Duncum, 1989). From this perspective, aesthetics is reconceptualized as inherently social and political (Freedman, 2000), and criticism is seen as a valuable tool for analyzing culture (Nadaner, 1985).

As a term, “visual culture” embraces popular culture, mass media, advertising, and entertainment as well as what we have traditionally known as fine arts, crafts, design, and artifacts. Duncum (2001) proposes that “visual artifacts exist in relation to other semiotic codes and appeal to sensory modes other than sight such as language, sound, music, human gesture, and cannot be grasped without taking these modes into account” (p. 104). Furthermore, he sees artifacts and perceptions about them as context bound. In other words, they are historically, socially, and politically determined and cannot be studied in isolation from these factors. Chapman (2000) has expressed similar observations about the complex interface of sensory-aesthetic stimuli that pervade contemporary culture including space design, architecture, sound, light, color, and aroma. Thus, the multimodal nature of culture requires citizenry who are multiliterate. And literacy is seen as more than encoding and decoding; it is a profoundly political social practice.

Given the challenges of studying a simultaneous array of sensory input and messages coded in semiotics, methods of inquiry used by ethnographers, psychologists, and sociologists may be helpful (Desai, 2002). Ethnographers provide context-specific methods of inquiry for examining the particularities of experience. Psychologists...
study action and response, the subliminal, the overt, and the covert that cause human beings to feel, respond, and act in certain ways. Sociologists, interested in human social behavior and the ways it can be organized, use skills that attend to broad patterns of behaviors, systems, organizations, and institutions. Some contemporary artists have adapted ethnographic methods into their art-making process (Desai, 2002). Others are complicit in the design and shaping of visual and sensory-aesthetic culture. The vast majority is indeed the intended audience for whom cultural experience is targeted with the intent of generating certain desired results.

Psychologists attend to how human beings respond and make sense out of their experiences. They are interested in how the mind and emotions can be influenced and respond. They gather information through data collection and analysis of behaviors and responses under both real and/or experimental conditions.

Sociologists study ways human behavior is organized and orchestrated. Thus, the medium and the message, the intended audience, desired behavior, and motivating force, as well as the interplay between forces set in motion, are all data worth analyzing. Sociologists also evaluate the movement of ideas as well as the scale, scope, and layering of media and message. Subsequently, they can entertain ideas about how human behavior is influenced, affected by a chain of events, redirected, even manipulated—to ends both questionable and honorable, intended and unintended.

**Practice**

**Recommended Strategies**

Be alert to developmental differences that might have an impact on investigations of visual culture (Cheng, 2002).

Employ questioning strategies that facilitate discovery learning (Yokley, 1997).

Expand “the canon” beyond traditional art to include popular culture and mass media. Enlarge the range of artifacts that are examined with a continued focus on the social worlds of visual imagery as they constitute an embodiment of attitudes, beliefs, and values (Duncum, 2001; Zelevansky, 1998).

Rethink an exclusive focus on things visual (Duncum, 2002a).

Experiment with images to see how text, music, or narrative “anchor” an image and have the capacity to change its meaning (Duncum, 2002a).

Examine the role of text in imagery (Duncum, 2002a).

Study a number of different presentations of the same text (Duncum, 2002a).

Examine imagery created for the corporate world, especially highly seductive multiple modalities (Duncum, 2002a).

Engage students in critical discussions that cause them to reflect and reconsider messages found in popular visual culture; encourage them to find empowerment in creating their own images (Stokrocki, 2001; Tavin & Anderson, in press).

Facilitate examinations of art as a social statement, in a social context, from social perspectives. Help students understand the power of the visual arts and the freedoms and responsibilities that come with it (Freedman, 2000).

Orchestrate dialogues about artworks with an eye to transforming the forms of power and domination (Desai, 2002).

Orchestrate investigations of popular icons that move to and from studio practice to examine ways in which popular culture serves human needs (Pistolesi, 2002).
OUTCOME II: FACILITATING INVESTIGATIONS INTO HISTORICAL, CULTURAL, AND SOCIAL CONTEXTS

REFERENCES


Visual culture is reported to reflect “the recent proliferation and pervasiveness of visual images and artifacts and their importance to social life…. The range of visual culture reflects and contributes to the construction of knowledge, identity, beliefs, imagination, sense of time and place, feelings of agency, and the quality of life at all ages.” This advisory offers background and rationale, aims, and pedagogical recommendations related to visual culture.


Congdon, K. G., & Blandy, D. (2001). Approaching the real and the fake: Living life in the fifth world. Studies in Art Education, 42(3), 266-278. Discussion considers the human propensity to replicate and the contemporary experience of a world copied, appropriated, simulated, re-created. Suggests, among other ideas, that this has created “a wild and wonderful environment for debate, dialogue, and creation of new ways of thinking and living” (p. 273). Proposes that critical pedagogy will allow art educators to assist learners in clarifying their own values and beliefs while discovering the points of view of others” (p. 276).


Desai, D. (2002). The ethnographic move in contemporary art: What does it mean for art education. Studies in Art Education 43(4), 307-323. Desai examines the use of ethnography as a component of contemporary art. Ethnography is defined as a process of inquiry and a written representation of culture. Articles provide specific examples of contemporary artwork that draws on ethnography and notes its increasing popularity in art education.

Duncum, P. (1989). Children’s unsolicited drawings of violence as a site of social contradiction. Studies in Art Education, 30(4), 249-256. Article reviews the psychological debate regarding violence in children’s unsolicited drawings and the social contradiction of violence as something that is both condemned and authorized. Reviews findings regarding violence in the media. Argues for giving children the choice of their own subjects and warns against a too ready acceptance of the social conditions in which they are selected. Discusses some intervention strategies. Concludes that “children’s spontaneous drawings of violence are important because they bear witness to children’s attempts to make sense of a major social reality that includes significant contradictions of thought and action” (p. 255). He suggests such efforts should not be ignored even if they pose challenges to teachers. Reference list identifies numerous sources on the effects of television and media.

Duncum, P. (1990). Clearing the decks for the dominant culture: Some first principles for a contemporary art education. Studies in Art Education, 31(4), 207-215. A critique of an emphasis on art education on the promotion of high culture. Discusses seven principles for cultural studies: categories of culture should be regarded as descriptions, not evaluations of what a society should value; understanding culture requires an insider’s perspective and a willingness to consider how cultural products are composed of conventions, inventions, and complex variations; cultural production is profoundly social in nature; users of dominant culture actively discriminate; the content of dominant culture is age old; dominant culture has a user orientation and is rooted in people’s conditions of existence; and standards of culture vary over time and are politically and socially engaged. Suggests that a socially relevant art education can make a positive contribution by seeking “an insider’s experience, with a collaborative model of production, (respecting) students for how they cope with the conditions imposed upon them, (acknowledging) the perennial nature of dominant-culture content, and (recognizing) the changing political and social contexts in which cultural standards are established, maintained, and revised…” (p. 214).

Duncum, P. (2001). Visual culture: Developments, definitions, and directions for art education. Studies in Art Education, 42(2), 101-112. Article discusses assumptions that underpin visual culture, characterizing the study of visual culture as greatly enlarging the range of artifacts that one might examine. While the study of visual culture concerns “substantially visual artifacts,” there is “an interest in more than the artifacts themselves, (specifically) the social conditions in which the artifacts have their being including their production, distribution and use” (pp. 106-107).

Duncum, P. (2002a). Visual culture: Multimodality and meaning. Presentation at the National Art Education Conference in Miami Beach. Defines the concerns of visual culture to include its multimodal nature and the manner in which different modalities “anchor” and create meaning. Offers ideas for implementing the study of visual culture.

Duncum, P. (2002b). Clarifying visual culture art education. Art Education, 55(3), 6-11. Further clarification of VCAE. VCAE sees making and critique as symbiotic yet is a new paradigm with profoundly historical roots, cross-cultural in nature, and as natural as another study of culture. It values both aesthetic value and social issues and will emerge incrementally as practice develops.


Nadaner, D. (1985). Responding to the image world: A proposal for art curriculum. Art Education, 37(1), 9-12. Author suggests that art education needs to encourage criticism rather than the regurgitation of images. Further, it needs to produce alternative images rather than reproduce existing ones (p. 11). Nadaner offers three proposals for turning attention to the pervasive, the invisible, and the possible. Sees criticism as playing a significant role in analyzing pervasive imagery, supplemental and alternative imagery as a way of seeing what mass media does not show, and contemporary artists’ search for means of effective representation as a model for student work in which a dialogue about experience and representation can be carried into their work.

involves visual representations that saturate the fabric of life, shape experience by capturing imaginations and engaging desires, and contributes language, codes, and values. Discusses the implications of a paradigm shift for the field of art education.

Tavin, K. (2001). Swimming up-stream in the jean pool: Developing a pedagogy towards critical citizenship in visual culture. The Journal of Social Theory in Art Education, 21, 129-158. Paper proposes that art education should “be viewed as a political, social, and cultural practice that addresses a broad range of images if it is going to help students (and teachers) adapt to the new critical landscape (rather than try to escape from it).”

Zelevansky, P. A. (1998). The family life of commonplace images. Unpublished doctoral dissertation, Columbia University Teachers College. Proposes that art education pedagogy expand its concerns to embrace aspects of visual expression beyond those of art and art history. Suggests that commonplace images (maps, postcards, tickets, trading cards, memorabilia, and souvenirs) are dynamic in offering representational and documentary information and provide essential orientations in space, time, and memory. Recommends a visual thinking curriculum that balances theory, formal analysis, art practice, and self reflexive critique.

RESEARCH

Cheng, M. (2002). Culture and interpretation: A study of Taiwanese children’s responses to visual images. Unpublished doctoral dissertation, Ohio State University. DAI, 63, no. 01A, p. 58. Database of 56 children, ages 8 to 14, who were asked to interpret six different images from fine art and advertising. Findings include the observation that younger children draw on their family life, the mass media, schooling, and their general beliefs and values to interpret images. Only older children appear to be aware of the commercial purposes of advertisements.


REPORTS FROM PRACTICE

Anderson, D. (2002). An investigation into visual culture as an issues-based art education. Unpublished master’s thesis project, Towson University. Report describes the motives, design, and implementation of a unit of study with upper-elementary students that translated theory from visual culture into practice. For results of this study see the article by Tavin and Anderson (in press).
Making Interdisciplinary Connections

**THEORY**
Interdisciplinary learning is supported by a number of assumptions. One of the most important is that students need a solid grounding in individual disciplines in order to benefit from interdisciplinary efforts. Further, each discipline represents a form of knowledge with separate and distinct characteristics, unique concepts and propositions, procedures and end products. Brought together by significant concepts, flexible thinking and real-life problem-solving skills can be encouraged (Jacobs, 1989).

The content of art has often concerned themes, events, ideas, and questions that have been pursued through other disciplines. In that art provides a unique way of examining an idea or concept, a theme or an event, a subject or an object, it is consistent with the nature of art to seek connections across traditional boundaries defined by the content areas within a school curriculum. Some would suggest that deep connections in history already connect art with science (Schlain, 1991). In that many students are visual learners or learn better when multiple intelligences are used (Gardner, 1985), interdisciplinary connections encourage visual thinking and provide a means for visually processing information that can only partially be known otherwise.

White and Robinson (2001) shed some light on how making art enhances students’ appreciation and understanding of subject matter drawn from another discipline. They suggest that the thoughtfulness engendered by the process of thinking through the production of art broadens their receptivity to the purely conceptual aspects of the subject under study.

In Learning by All Means: Lessons from the Arts, Howard (1992) suggests that encounters with exemplars combined with doing

**BETTER PRACTICE**
Teachers who use interdisciplinary strategies help learners process information visually, make connections among the arts, and discover relationships between the visual arts and other disciplines.

The content of art has often concerned themes, events, ideas, and questions that have been pursued through other disciplines. In that art provides a unique way of examining an idea or concept, a theme or an event, a subject or an object, it is consistent with the nature of art to seek connections across traditional boundaries defined by the content areas within a school curriculum. Some would suggest that deep connections in history already connect art with science (Schlain, 1991). In that many students are visual learners or learn better when multiple intelligences are used (Gardner, 1985), interdisciplinary connections encourage visual thinking and provide a means for visually processing information that can only partially be known otherwise.

White and Robinson (2001) shed some light on how making art enhances students’ appreciation and understanding of subject matter drawn from another discipline. They suggest that the thoughtfulness engendered by the process of thinking through the production of art broadens their receptivity to the purely conceptual aspects of the subject under study.

In Learning by All Means: Lessons from the Arts, Howard (1992) suggests that encounters with exemplars combined with doing
In conducting an internship specifically focused on interdisciplinary connections, Jones (2001) notes that the challenge is to create instruction that does justice to the two (or more) disciplines brought together. Each discipline must be taught with integrity. Jacobs (1989) suggests interdisciplinary connections can be tested for their validity using the following criteria:

- Concepts must be important to each of the related subjects.
- Enhanced learning of the concepts should result from comparison across disciplines.
- Interplay of disciplines should form larger, more holistic views and attitudes.

In practice, there are some typical avenues for interdisciplinary teaching and learning. Some efforts have been the focus of research studies, and others have come to light through reports from practice by teachers. The options are presented here starting with the simplest and easiest avenues for change, moving toward more complex collaborations.

**All by Oneself: Art Teacher in Search of Partially Processed Information in the Curriculum**

In this scenario, the art teacher actively inquires among colleagues to find out what they are teaching. Understanding that much of the curriculum is processed through only one mode of thought and expression, any number of topics from science, math, social studies, language arts, and music might present an opportunity for students to bring to art new content they are learning. For example, a student teacher invited children to share their new knowledge about bug parts and then created a printmaking lesson that would allow them to visually represent bugs in an environment from different points of view. Just having to visualize the bugs caused children to pause and reconsider what they knew and could think about while, at the same time, children were learning representational skills and techniques with new media (Carroll, 1996). A reciprocal move would be to let colleagues know what the art curriculum for the year will be. The ultimate goal here is to encourage dialogue that might develop into more collaborative planning and teaching.

**One or Two Teachers: Alternating Among Symbol Systems**

It is possible to move among symbol systems within the art class or between art and another subject. Many reports suggest that processing ideas in more than one mode of thought and expression yields positive results. For example, several reports suggest the reciprocal relationship between drawing, writing, and concept development (Colbert, 1984; Olson, 1987; Hamilton, 1993; Ostrow, 1996; Ritchie & Kange, 1996; Whitin, 1996; Edens & Potter, 2001). Others report improved learning in math as a result of an art integration (Forseth, 1980; Cossentino & Shaffer, 1999). Other studies suggest the merits of an art-science integration (Smar, 2000) and American history and art (Corwin, 1990).
Two Teachers: Making Conceptual Connections, Developing Complementary Skills

In supervising an interdisciplinary internship for a decade, Jones (2001) has collected samples of interdisciplinary units that make conceptual connections between art and another discipline such as science, math, language arts, and social studies. The goal of such an interdisciplinary connection is to foster learning in both areas of study. It requires collaborative planning. Jones reports that art teachers are fully capable of finding creative and visual ways to teach concepts from other disciplines. What seems harder is to also teach skills in art so that the product of the investigation is aesthetically and artistically realized. A published example of such a correlation illustrates how a text from language arts came alive, leading to a deeper grasp and understanding of the story. How did it work? On one hand, students really had to attend to the text as they searched for visual information. As for art skills, students developed their skills in rendering characters, expression, settings, and action (Wolf, 1999).

Two or More Teachers: Thematic Connections Across the Curriculum

Deep and rich connections surface from theme-based approaches where a concept or idea is investigated through multiple areas of the curriculum (Jacobs, 1989; Perkins, 1989; Arnold, 1996). Perkins (1989) notes that some themes are better than others. He equates a good theme with the idea of “a lens worth looking through.” He presents five general criteria for selecting a good theme: 1) it applies to a wide range of topic areas; 2) it applies pervasively throughout a topic; 3) it discloses fundamental patterns; 4) it reveals similarities and contrasts; 5) it fascinates teachers and students, drawing them into the subject matter, provoking curiosity and inquiry (pp. 70-71).

Total School Effort: Moving Art (or the Arts) to the Center of the Curriculum

Here, the arts are at the center of the school curriculum, literally and figuratively (Read, 1945). In this setting, teachers are often recruited who have an interest in or preparation for interdisciplinary teaching based on the arts. Decisions are made through a group planning process, and thematic investigations may run through the grades as well as across the curriculum. A concept-based curriculum focused on key ideas and essential questions might place the arts in a position to center the entire curriculum.

Recommended Strategies

Participate in school-initiated processes for curricular change; be an advocate for the visual arts by educating colleagues about interdisciplinary possibilities. Do your own research through informal discussions with teachers and surveys that inquire about the content and focus of their teaching plans. Inquire about any challenges teachers see in teaching skills or concepts or to specific populations. Consider how you might support desired learning through the art program.

Determine the conditions for curricular change in your school and pursue the option most likely to succeed (Smar, 2000).

Search for ideas, themes, and/or concepts that ease the boundaries between disciplines (Perkins, 1989; Arnold, 1996).

In themes, identify several options and check to see if they suggest both broad and deep investigations. Note that some themes are better than others. Narrow themes, perhaps related to subject matter or one idea, are less stimulating than broader themes and metaphorical concepts (Jacobs, 1989; Perkins, 1989).

Brainstorm ways to integrate content, concepts, or themes, taking into consideration the developmental and contextual needs of target populations (Gardner, 2001; Jones, 2001).

Consider art learning as well as learning in the other discipline(s); consider how visual thinking, artful forms of expression, and aesthetic processes can contribute to broad and deep learning (Cossentino & Shaffer, 1999).

Develop ideas in concert with colleagues, sharing ownership of the curriculum where possible (Smar, 2000).

Maintain the integrity of all disciplines; look for underlying concepts yet develop complementary skills, not just interchangeable ones (Howard, 1992; Cossentino & Shaffer, 1999; Jones, 2001).

Determine if technology can play a role, making it possible to work in a traditional domain (such as mathematics) in an expressive way (Cossentino & Shaffer, 1999).

Consider if it is going to be necessary to teach representation skills; note that students will waffle on an idea if they cannot represent it (Wolf, 1999).

Aim for a multiplicity of solutions (Howard, 1992).
REFERENCES


Hamilton, C. (1997). Artistic strategies. In J. Simpson, J. Delaney, K. L. Carroll, S. Kay, M. Kerlavage, & J. Olson. Creating meaning through art. pp. 207-257. Upper Saddle River, NJ: Merrill, Prentice-Hall. Defines artistic strategies as those that visually, spatially, or tactilely incorporate graphic images, symbols, and forms as the basis for communicating meaning. Chapter offers examples for gathering ideas, planning, observing and recording, connecting, assessing, and reflecting. Their use in language arts, English, and literature as well as in science, social studies, and mathematics is discussed. Annotated references include resources for drawing and cross-curricular education resources in addition to a list of books by artists that visually present stories, travelogues, and studies for art and media.

Howard, V. A. (1992). Learning by all means: Lessons from the arts. New York: Peter Lang. Howard argues that the special contribution arts can make to the learning process is their capacity to appeal to and harness students’ aesthetic nature through performing, making, and reflecting.


Parsons, M. J. (1998). Integrated curriculum and our paradigm of cognition in the arts. Studies in Art Education, 39 (2), 103-116. A review of a symbols systems view of cognition in the arts and its limitations. Argues that this view restricts thinking. Suggests that the integration of learning through the arts requires a different paradigm. In an interpretive account of the arts, the arts are still seen as cognitive but not linear or logical; rather they are imprecise, multilayered, always in the process of translation, never precisely fixed in meaning. If the end goal is increased possibilities for making meaning, such a view would connect art with culture—and the rest of the school curriculum.


Read, H. (1945). Education through art, 2nd Ed. New York: Pantheon Books. Classic text that argues for placing the arts in the center of education. A vision, for the most part, as yet unrealized.

Schlain, L. (1991). Art and physics: Parallel visions in space, time and light. New York: Quill. Book tracks breakthroughs in art and physics through history finding a correlation of visions. In brief, an exploration of concepts from the larger gestalt influencing investigations in both fields independently. Stated goal of the book is to reach artistically inclined readers who want to know more about new physics and scientists who would like to have a framework for appreciating art.


RESEARCH

Re: Drawing, Writing, and Reading

Black, J. G. (1995). Teaching elements of written composition through use of classical music and art. The effects on high school students’ writing. Unpublished doctoral dissertation, University of California–Riverside. Dissertation Abstracts 56 no. 06A: 3034. Data base of 180 students of high, average, and low ability in four treatment groups given five-week, twice-a-week interventions. The group receiving visual art treatment improved in their use of rhythm, conflict, and unity with statistically superior results compared to the groups that received the auditory treatment and the control group that used literature alone as its treatment. Study suggests that the aesthetic element inherent in all the arts is a viable tool for helping students to read and respond to literature and thus influence the quality of students’ writing in regards to rhythm, conflict, mood, tone, and unity.

Caldwell, H., & Moore, B. H. The art of writing: Drawing as preparation for narrative writing in the primary grades. Studies in Art Education, 32 (4), 207-219. A study with 42 second and third graders used two different preparations prior to writing. One group used discussion, the other used drawing. The quality of the drawing group was significantly higher than that of the control group. The researchers concluded that drawing to plan and assemble ideas for writing offers several advantages to the novice writer: it facilitates the exploration of ideas, reduces cognitive demands through loose ties with narrative form, and as an alternative symbol system, has certain structural advantages over writing.

Carroll, C. J. (1996). Draw first, then write: Kindergarten students as beginning writers. Unpublished doctoral dissertation, the University of Memphis. Study involved 111 kindergarten children prescreened and placed within two groups, one for experimental treatment, the other as a control. Over a seven-week period, the experimental group wrote lessons after observing a teacher model drawing to write. The control group had only writing as a model. Findings suggest that at first, drawing produced significantly more words but as students gained in their writing ability, they drew less.

Edens, K. M., & Potter, E. F. (2001). Promoting conceptual understanding through pictorial representation. *Studies in Art Education, 42*(3), 214-233. Report of a study to gather evidence on the utility of descriptive drawing as a means to promote understanding of scientific concepts and explanations from a cognitive perspective. Report includes discussion on the integration of the arts with other subjects, a cognitive approach to learning, and verbal versus visual or pictorial representation. Data base was drawn from 184 fourth and fifth graders; three treatments were compared: writing, learner-generated drawing, and copy illustration drawing. Results on pre and post tests of science concepts were correlated with treatment. Findings suggest that pictorial representation provides a viable way for students to learn scientific concepts. A model for integrating drawing activities into instruction is included.

Ernst, K. (1992). Picturing learning: Teacher research in words and images. Unpublished doctoral dissertation, the Union Institute. Observer-participant study including case studies of individual students and work samples of artwork and writing plus teacher-researcher’s dialectic notebook. Study suggests that art and writing, creative and visual thinking, and narrative voice are catalysts for meaningful discoveries.


Keller, C. A. B. (2001). Correlating arts and reading instruction for accelerated achievement in emergent literacy. Unpublished doctoral dissertation, Texas Tech University. Two-year study with one kindergarten teacher investigating the impact of art, music, and theater activities selected to support the reading curriculum of kindergarten children. Standardized tests were used in collecting data.


Underwood, C. (1994). The relationship between artistic development and school readiness of children entering first grade. Unpublished dissertation, Texas Woman’s University. DAI, 56, no. 02A, (1994): 0437. Database of 86 kindergarten students from two elementary schools. Study determined developmental level of artwork (scribbles, pre-schematic, schematic) and compared it to a global teacher rating of readiness skills and the Metropolitan Readiness Test. Data analysis yielded significant positive correlation between and among the three measures.

Cossentino, J., & Williamson Shaffer, D. (1999). The math studio: Harnessing the power of the arts to teach across disciplines. *Journal of Aesthetic Education, 33*(2), 99-109. Six students from Boston public high schools participated in a program at MIT. Computers and art proved to be a powerful combination of tools for thinking about concepts and ideas. Software used was Geometer’s Sketchpad.


Smar, B. J. (2000). Integrating art and science: A case study of middle school reform. Unpublished doctoral dissertation, the University of Toledo. DAI # AA0978728. This study sets an effort to integrate art and science within the broader agenda calling for school change and reform. The process of implementation was interactive and complex. The study concluded that capacity to address change and engage in meaningful dialogue, curriculum planning with common teaching practices and definitions, active participation of the art teacher, and shared ownership of the curriculum were all critical elements of the practical side of integrating the arts into the curriculum.

Convin, S. (1991). *Art as a tool for learning United States history*. New York: National Arts Education Research Center at New York University. Although the results of this study are inconclusive due to its premature end, the study provides a model for back-to-back courses in art and U.S. history in which teachers collaborate in the development and implementation of the curriculum. Student comments suggest the merits of making history visual and the role art can play in bringing history alive.

Gardner, K. E. (2001). Integrating art into the social studies curriculum. Unpublished master’s thesis project, Towson University. Model including selected art images and questions related to topics in Baltimore County’s world cultures curriculum. Designed for use by social studies teachers. Follow-up survey indicated that while interested, social studies teachers have little training in art and feel unprepared to make connections. Nevertheless, many believe art might enrich instruction. Study indicates that hurdles to achieving that end include lack of time to collaborate with art teachers and other priorities dictated by state assessments.


Luftig, R. L. (2000). *An investigation of an arts infusion program on creative thinking, academic achievement, affective functioning, and art appreciation*. *Studies in Art Education, 41*(3), 208-227. Article reports data from one academic year of a specific program implemented in two schools. Three grades were studied using multiple standardized tests on
a number of measures. Findings showed promising results, yet due to a number of factors including the short-term effects of the study, further study seems warranted.

Re: Specific Art Forms


REPORTS FROM PRACTICE

Arnold, A. (1996). Fostering autonomy through the arts. *Art Education, 49*(4), 20-34. Among the characteristics that seem to contribute to the success of this arts-based elementary curriculum is the use of “big ideas” to ground interdisciplinary explorations and guide authentic dialogue. Suggests that visual art, literary works, or other primary sources can be the catalyst for life’s big questions.

Carroll, K. (1996). Notes from observation of a third grade art lesson taught by Pam McLoughlin under supervision of Lenore Pesano in the Howard County Schools.

Jones, H. (2001). Partnerships that work: Innovative and developing partnerships between the Center for Art Education, Maryland Institute College of Art and public schools in the greater Baltimore area. In *MATE celebrates Successes in Teacher Education, 1* (Spring). Maryland Association of Teacher Educators. Paper describes the model program in which interns apply information about children’s developmental levels, instructional strategies, and management considerations to the problem of making meaningful connections between art and another discipline in curricula at the elementary and middle school levels.

Jones, H., with A. Hurley, H. Leatherman, R. Newman, J. Ramsey, & A. Price. (2002). Making meaningful connections: Interdisciplinary internships. Presentation for National Art Education Association conference in Miami Beach. Panel presentation with interns reporting units in which art ideas and media were used to explore concepts and skills in social studies, language arts, science, and mathematics. Interns illustrated the presentation with examples from elementary and middle school placements.

Olson, J. L. (1987, September). Drawing to write. *School Arts*, pp. 25-27. A comparison of pre and post samples of writing indicates that drawing and talking about the drawing are useful steps for visual learners who struggle with writing. Post-sample was freer from error, greater in detail, and communicated feelings and emotional content.


An elementary teacher of a math workshop begins with importance of drawing as a way for helping children solve mathematical problems. Significantly, children use manipulatives to understand the concepts inherent in a problem, not just to solve it. Notes, for some, evidence of a stage-like progression from pictures to symbols. Ostrow concludes that using pictures, drawings, and manipulatives is not so much a developmental matter as one connected with processes for approaching problem solving. Argues that all children need the opportunity to discover the approaches that work for them.


Wolf, B. (1999, December). Visualizing text: Illustrating a class book. *School Arts*, pp. 15-17. *The Call of the Wild* served as the text. It was divided among students so important points could be illustrated and put together in a class book. Understanding of the book appeared to be greatly enhanced through the process of visualizing and representing elements of the story line.

Creating Art in Response to Contemporary Issues and Concerns

**THEORY**

Art teachers mediate between the world of students and the world of art. Knowing how to bring the two together in meaningful and purposeful ways is an art in itself. Art, as well, is a mediator between the world of experience and an individual or a community. It can build solidarity, fortify a group under stress or challenge, celebrate passages in life, and mark accomplishments. Art is, among other things, a human behavior that serves deep and meaningful purposes (Dissanayake, 1988, 1991, 1992, 2000).

**BETTER PRACTICE**

Developmental and contextual issues arise out of students’ lived experiences every day. Some events are experienced personally and might include, on one hand, the need to celebrate one’s own or another’s achievements, and on the other, losses of friends, family members, property, and feelings of well-being. Other issues and events can affect an entire community such as local developments or nationally significant ones, good and bad. Allowing art, in a timely way, to serve the need to come to terms with ideas, thoughts, and feelings affirms deep purposes and meaning found in art and art making. Learning that art can help make sense out of experience (Burton, 2000) is half of the equation; the other half is actually making sense out of experience, through art, and being the better for it (London, 1989).

Contemporary artists, as well as examples from the history of art, model rich and diverse ways art can serve individuals and communities in meaningful and purposeful ways. Lippard’s (1990) survey of women and artists of color, many of whom experienced a fractured life, one foot in a native country and the other in the United States, demonstrates clearly that life’s challenges, journeys, separations and arrivals, meetings and mixing, stories and dreams, are appropriate content for art. Contemporary artists also model contemporary forms that range from wearable art to installations.
and performance pieces. They may have a particular appeal to students because these forms of expression offer ways to critique common culture or create ways to bring people together. Digital media, video, installations, group collaborations, and individual commentary are only some of the engaging options available through art.

Both theory and practice suggest that when there is something important to be said, the form will be crafted aesthetically with care (Dissanayake, 1988; London, 1989). Further, the means to do so will be mastered expeditiously with intent and purpose (Mann, 2002). In employing art in this manner, students will come to understand that artful expression of responses to personal, historic, civic, political, and natural events is a deeply meaningful purpose of art (Gablik, 1991).

PRACTICE

Recommended Strategies

Attend to what is going on in the students’ world of experience. Tune in to their behaviors, music, and trends in popular culture. Invite students to bring in issues, ideas, and forms of expression that interest them. Talk with them about what is happening around them. Stimulate dialogue about significant others and important life events (Ruopp, 1995).

Stay informed about contemporary developments in art. Consider the purposes and meanings found in these endeavors (Gablik, 1991). Regularly look at publications and visit exhibits that feature challenging new work. Invite students to do the same and share questions and perceptions.

Create opportunities for personal experiences to emerge in the context of the ongoing curriculum (Ruopp, 1995; Cherry & Mellendick, 2002). Be alert for unexpected developments that require processing through art. If need be, stop the course of study to deal with significant developments (Mann, 2002; Pistolesi, 2001).

Turn to art for models for ideas from artists who have dealt with similar issues or used contemporary art forms to deal with complex and challenging issues (Green, 1996; Mann, 2002; Pistolesi, 2001; Taylor, 1997).

Draw students into the process by empowering them to help shape the course of events (Pistolesi, 2001).

Find avenues for sharing their work with a broader community (Mann, 2002).
REFERENCES


In this article, Burton examines the notion that the arts offer possibilities for making a complex world meaningful. Further, she offers a picture of children's minds, centered within their lived experiences of self, world, and relationship, that can be engaged in the arts as makers and appraisers. Discusses child centeredness, the role of experience in the arts, invited acts and voices of materials, pervasive habits of mind, developmental continuity, and more.


Documents Fred Wilson's exhibition created from the collection of the Maryland Historical Society in which juxtaposition of artifacts and objects created new meanings of inclusion, exclusion, privilege, class, race, oppression, and control. Exhibit was a collaborative project with Baltimore's Contemporary Museum of Art.


Article examines the use of ethnography as a component of contemporary art. Ethnography is defined as a process of inquiry and a written representation of culture. Provides specific examples of contemporary artwork that draws on ethnography and notes its increasing popularity in art education.


The above four publications by Dissanayake present an unfolding investigation of the origins of the arts and their significance as a human behavior. In these works, she proposes that art is a way of making objects and rituals special, presenting, in memorable and aesthetic forms, important beliefs, values, and ideas. She suggests that art evolved as a human behavior because it contributed to survival, often in a hostile world with unpredictable forces and huge challenges. Only in modern times has art become the domain of specialists and art history, which is further explored.


Gablik shows how art can be a major force in life, an instrument for connection and healing. She constructs her thesis by discussing changing paradigms and moves to her central idea: making art as if the world mattered. The book is enriched by her identification of artists who emulate this vision.


Discusses the cross-cultural process taking place in the work of Latino, Native--, African-, and Asian-American artists. Illustrated with examples of artwork framed by a discussion of cultural concepts, ideas, and meanings. Identifies several specific ways in which the visual arts serve human needs for self-identity and narrative expression.


Drawing on philosophers, London presents art as a way of bringing together mind, body, and spirit. When they are in alignment and working together, he notes, visual form takes care of itself. It is aesthetic, well crafted, and full. Another publication forthcoming from Shambala Press is a sequel by London entitled *Drawing Closer to Nature* in which a holistic approach to art education is further explored.

Research


An analysis of interviews with five black artists revealed that ideological struggles for assimilation and self-determination influence artistic production of and meanings to be found in African American contemporary art.

Reports from Practice


Article offers accounts of a collaboration by an artist and an art teacher. “Out of the Box” is described as an investigation inspired by Cherry and his sculpture and conducted with Mellendick’s middle school students. The collaboration was designed to meet the statewide curriculum mandate for eighth grade of refining aesthetic judgments through master approaches. Students developed three-dimensional portraits giving homage to someone special in their lives. While the article focuses on a teacher-artist collaboration and the kind of artistic problem that engages students, it also provides a model for structuring art encounters that stimulate introspection and thought about the value of special relationships.


Article reports on a number of issues explored with adolescents by different teachers. Themes included a response to drunk driving, packaging your social consciousness, capturing an emotion on film, and the war against hunger.


Reports on a student teacher’s use of installation artist Meg Webster as a stimulus for thinking and making art in response to ideas about the environment, conservation, and ecology. Suggests that the exploration of nontraditional media expands the canon of art students will consider as significant while reinforcing the importance of diversity, divergent thinking, and multiple modes of representation.


Book offers examples of various forms of collaborative artworks inspired by the work of contemporary artists. Examples include a variety of artworks created by students from elementary to secondary programs.


Mann describes how turning to the history of art for examples of how artists have dealt with tragedy and war provided students with ideas about how they might process, through individual digital works and a collaborative installation, their reactions to 9/11. The work began with individual responses drawn from the media and processed visually. As the work developed, students developed an installation and a group collaborative sculpture. Ceremonies developed around the piece, bringing the community together, and since then, the work has traveled to several locations, was reported by the local media, and was featured as an example of rigorous and challenging investigation. In part, the work helped an entire community, living close to the Pentagon, come to some terms with feelings, questions, and losses so powerfully unearthed. Among his observations was the speed with which students gained facility in using soft-
ware because they were intent on making certain kinds of images.

Article reports how a study of contemporary artists inspired student collaborations and installations in response to the earthquakes that leveled the campus at California State University, Northridge. Turning to installation artists, students created installations inspired by Christo and others commenting on issues ranging from the fragility of the earth’s crust to its impact on the homeless and the environment. In this case, art became a healing and communal process.

Article describes a visual narrative unit based on Faith Ringgold's *Tar Beach.* Middle school students used many of her conventions to tell stories about transformative events and significant others in their own lives.

Contemporary examples of artists Dan Eldon and Candy Jernigan who created journals to record their lived experiences provided inspiration for the development of journals with middle school students. Some formal assignments as well as more expressive prompts helped shape the journals documenting highly personal and meaningful explorations.

Article reports on art workshops for homeless people offered the opportunity to make work for themselves or for an exhibition called “Homeless Still.” In conjunction with the show, teachers explored the topic with classes in school, producing scrolls, an installation, and shelter designs.

Artwork dealing with how society values the environment (including Ukeles, Mazeud, and Goldsworthy) stimulated student investigations. Teams of high school students cooperatively planned earth works that reflected, and continued to fuel, a growing consciousness of their own attitudes, use of materials, and the power and responsibility of art.

Article begins with a discussion of civic and social responsibility in art and education. A special project in which university students, children in an afterschool program, art faculty, and professional potters all joined together to make ceramic bowls. A ritual dinner brought the community together to raise funds. The author also surveyed others who had participated in the Empty Bowls project and reports benefits as well as suggestions for initiating such a project.
OUTCOME III

Facilitating Engagement with the Art-Making Process

Investigating Materials and Ideas
Structuring for Creative Thinking
Forming Elegant Problems
Designing Problems Based on the Real World of Work
Facilitating Engagement with the Art-Making Process
Investigating Materials and Ideas

TheorY

Human beings, by their nature, have an interest in using tools and materials (Dissanayake, 1988). Touch, feel, and the manipulation of materials provide a direct and particular way of knowing and thinking (Hill, 1988). Under the heading of “Concepts and artistry,” Burton (1980) discusses what she calls the “world of materials” through which pre-representational children encounter visual, relational, and expressive concepts that form the basis of artistic language. With further explorations and experiments, children begin to develop a sense of the “fit” between ideas and materials or the range of different ideas materials can accommodate.

Kay (2000) reports that expertise emerges out of time spent in practice, the development of a repertoire of technical skills, experience solving visual problems, and the creation of a personal aesthetic bias or sensitivity. Artists typically form their own repertoire of ideas about what will succeed as well as an informed sense of what might fail. Her study also suggests that periods when artists invest in the expansion of their knowledge base may correlate with “a waning period in the aesthetic development of a personal voice” (p. 230).

Better Practice

Teachers who orchestrate thoughtful investigations of materials help students develop a repertoire of ideas about materials and expertise in using artistic media and processes.

Better Practice

Getting Ideas from Materials

Ideas are not just pushed through materials; often it is the reverse in that ideas come from working with materials, finding out what they can do, playing, and experimenting long enough to get a sense of the possibilities they present. Guided play and experimentation can help reveal the possibilities inherent in materials. While more deliberate planners might think something through before engaging with materials, spontaneous thinkers and those with more kinesthetic, spatial, and tactile modes of thinking and problem solving often need direct experience with materials to generate ideas. An interest in collecting, arranging, combining, and creating with materials is a natural affinity common among both children and artists (Szekely, 1988).

Investigations in a Developmental Light

As learners become more conceptually and physically able to handle both materials and ideas, investigations can move from...
the simple to the complex. Materials, processes, and techniques can be revisited, as in a spiral curriculum, each encounter giving access to increasingly complex possibilities. Re-encounters with materials or processes can be opportunities to take them to a new level where more challenging questions and applications can be entertained. A spiral curriculum, in which a certain range of materials and processes are periodically revisited over time, builds new skills and suggests new ways materials can accommodate ideas. Matching tasks to students' level of ability so that they are appropriately challenged contributes to higher levels of engagement and satisfaction (Csikszentmihalyi, 1990).

**Artful Investigations**

Even simple materials can be used in complex ways. Artful techniques with ordinary materials can produce rich effects. Crafting materials can be its own source of pleasure. Innovative techniques and processes develop out of experimentation, research, and the desire to render ideas and meaning. Attention can be directed to techniques and processes that produce interesting and rich effects, subtle nuances, and well-crafted solutions.

**Working toward Expertise and Personal Voice**

Over time, investigations that include experimentation, reflection, and application gradually build a sense of what strategies with materials and processes are likely to prove personally and artistically satisfying (Kay, 2000). Extended explorations that focus practice and cultivate persistence and problem solving can develop a body of work in an area of concentration (Tomhave, 1999).

**Specific Strategies**

Engage young children in an investigation of materials related to visual concepts and themes, alternating among two- and three-dimensional media (Townley, 1979).

Ask children to tell you about their work, and ask questions that lead children to pause and reflect on their choices and the ways in which certain visual qualities and materials relate to different ideas (Burton, 1980).

Consider an exploration of a theme or subject matter (such as plants) in different media where students reflect on distinct visual qualities and ideas made possible through different media (Munday, in progress).

Direct students' attention to the sensuous nature of specific materials: how they feel when being used as well as what kinds of visual qualities result. Challenge students to invent ways to use the materials and/or offer demonstrations that suggest and inspire pushing the limits of the medium (London, 2003).

Engage students in the collection of objects or materials. Involve them in organizing them into sets, sequences, series, groups by visual or tactile qualities; ask them to explain groupings (London, 1994).

Organize art materials by tables or in special areas so that a given theme can be explored through different materials and the results compared (Flynn, 1996).

Guide thoughtful and artistic investigations of specific media so that understanding as well as facility develops over time. Attend to all facets of the process including the organization of tools and materials and thoughtful processes (Smith, 1993).

Orchestrate journal-based investigations that include a number of assignments exploring different questions, visual qualities, and media; encourage a search for materials, the incorporation of found objects and popular culture, and experimentation with mixed media (Robinson, 1995; Ruopp, 2003).

Vary materials, testing the ways in which they serve the expressive needs of students. Consider, for example, the manner in which three-dimensional media such as clay can not only accommodate but encourage the expression of intended ideas and feelings (Graziano, 1999).

Consider testing the limits and possibilities of a single medium or material (for example, paper) with different grade levels and/or groups of students. Develop an exhibition of all works to show the range of possibilities and inventive solutions (InSEA presentation, Helsinki, Finland, 1992).

Distribute a limited set of the same materials (for example, paper, string, a couple of fasteners, etc.) to groups of students and initiate a competition to see which group can, within a limited amount to time, build something taller than another group (Booth, 1994).

Encourage the use of sketchbooks as a thinking place to collect, develop, and organize ideas (Thompson, 1995). Have students make their own sketchbooks, and provide assignments to keep ideas rolling (Ruopp, 2003).

Allow students to experiment with materials while musing over possible ideas related to a theme, existential question, or problem (Carroll, 1984).

Engage students in a search for materials with a special eye for interesting objects in their environment that might be recycled, carry meaning, and have expressive potential. Examine such finds to explore cultural and physical contexts, discover inherent qualities, and speculate on ways the material might be decon-
structured and/or used in artwork (Elliott & Bartley, 1998).

Allow students to develop their expertise in using a medium through repeated, sequential applications. For example, focus on painting for a time so that practice and experience with a medium build skills and ideas about what can be done with it as it is applied to different subject matter or themes (Aukerman, 1994; Ewing & Lewis, 1999; Smith, 1993).

Set up a problem so that a given subject matter is explored numerous times, varying the media and style; have students reflect on the relationship between the medium, the style, and ideas suggested by the work (Carroll, 1984).

Examine the work of artists for special techniques that might interest students; have students conduct their own research; invite students to share ideas, demonstrate for each other, relate techniques and processes to the meanings created.

Introduce students to contemporary work and new media. Orchestrate investigations modeled after such artists and offer opportunities to work with new media and forms as ways of dealing with students’ own contemporary issues and concerns (Gablik, 1991; Lippard, 1990).

Develop special areas of technical expertise with materials, and share that expertise with students. Continue to develop a teaching repertoire of ideas for use with materials, technology, and different forms of expression. Look to see what artists might provide new models for dealing with ideas through different kinds of art materials and processes, products, and performances (De Muro, 1992).

**REFERENCES**


For two decades, Csikszentmihalyi has conducted studies on the states of optimal experience. Appropriately matching the level of challenge in a task to the ability of learners appears to be an important strategy teachers can use in avoiding boredom (as in too little challenge) and frustration (as in too much).

Dissanayake, E. (1988). *What is art for?* Seattle: University of Washington Press. Working from a bio-behavioral view of the arts, this author outlines many human propensities that are related directly to the arts. Use of tools is one of them.


Lippard’s presentation on artists who have moved from one culture to another is organized thematically, features the work of minority and women contemporary artists, and includes a variety of art forms that use materials in special ways.


Szekely is interested in the artist-teacher who serves as a catalyst for creating conditions that encourage students to use their own ideas for making art. He offers suggestions for helping children use their natural abilities, integrate their sensory, emotional, and intellectual experiences, value their own personal feelings and ideas and communicate them to others, and use art making as a way of exploring and understanding the world around them. Sections focus on introducing students to the art process, creating a classroom environment favorable to artistic learning, planning the lesson, evaluating and recognizing student performance, and becoming an artist-teacher.


Book sets forth a process for making art based on big ideas. Chapter 5 looks at setting aesthetic boundaries including choices of media and techniques. Walker notes that conceptual concerns are foremost. Thus, questions regarding what materials and forms can serve ideas need to be addressed.


A discussion of studio art highlighting the primacy of doing and making and how an integrated cycle of intending, acting, realizing, and re-intending leads from unreflective to reflective thought. The notion of praxis as a dialectic between critical reflection and action is explored.

**RESEARCH**


The purpose of the study was to examine how early adolescents used clay in the expression of personal stories and to explore how clay’s plastic and spatial properties accommodated the narratives and symbolic representation. Findings suggest that the dimensionality and interactivity of clay encourage expression of intended meanings.


The study begins with the thesis that considers requisite skills and knowledge related to teaching ceramics. Broad needs surface and suggest that teachers want more information and techniques to support instruction.

Louis, L. L. (2000). What children have in mind: A study of early graphic representation in paint. Unpublished doctoral dissertation, Columbia University Teachers College. An examination of children’s graphic development between ages 4 and 7. Findings suggest the early symbolic stage of painting development involved three overlapping phases. These include an intermediate stage where the associative properties of paint are discovered to give shape to ideas and experience.


An examination of various motives for teaching clay. Argues that motor-sensory learning is related to qualitative thinking and insight formation. Identifies earlier notions in which tactile discernment was considered a “master sense” with clay modeling being an extension of the mind through the hands and later notions about the role of “sense-impressions” in creating cognitive generalizations based on the particulars of the sensate experience.

Report based on the author’s study with artists. Suggests that expertise emerges out of time spent in practice, the development of a repertoire of technical skills and experience solving visual problems, and a personal aesthetic bias or sensitivity. Implies that periods when artists invest in the expansion of their knowledge base may correlate with “a waning period in the aesthetic development of a personal voice” (p. 230). Also suggests that aesthetic development is an issue for disciplines other than the visual arts.


MODELS FOR PRACTICE


Examples of work by upper-elementary children demonstrate how skills with painting can be developed through a sequence of lessons. Aukerman models a specific method for working from works of art in which questioning strategies help students connect emotionally with the works and draw ideas they can use in making personally meaningful thematic paintings. Testing the method in both a laboratory setting (Young People’s Studies, Maryland Institute College of Art) and in her home school, Aukerman demonstrates that sustained practice with materials develops increasingly more successful paintings.

Booth, P. (1994). Personal conversation with Booth in which he described an exercise he used with Maryland Institute’s Pre-College Program.


Under the heading of “Concepts and artistry,” Burton discusses what she calls the “world of materials” through which pre-representational children encounter visual, relationship, and expressive concepts that form the basis of artistic language. With further explorations and experiments, children begin to develop a sense of the “fit” between ideas and materials or what ideas materials can accommodate.


Article describes the problem the artist set for herself in wanting to develop representational skills. More than 200 drawings were made of the same subject matter (a view out a window into a garden with trees, sky, statuary, and water). Some drawn as contrasting pairs on the same sheet of paper, each explored a combination of media and style resulting in a body of work Bartlett published in the book In the Garden.


This article provides an ecological rationale for exploring cultural and material environments for finds that might be dismantled, sorted, and used in creating artwork. The notion that materials have inherent qualities and carry meaning is reinforced along with the idea that artists play a significant role in the human ecosystem.


Art educator Linda Lewis and basketball player Patrick Ewing team up in this book, which demonstrates specific ways to develop skills in painting. It is illustrated with examples of his own work and work by children. Includes tips for parents and educators who wish to support children in their painting experiences.

Flynn, L. (1996, December). Studio 207: My special place. School Arts, pp. 36-37. Article describes her “classroom-turned-art-studio” complete with an “SPA”—Special Painting Area—so that two students always have the opportunity to respond to the day’s lesson in paint. She also varies materials by table groupings to give students the opportunity to explore the potential of more diverse materials.


Munday, M. M. (In progress). Explorer Sketchbooks: Investigating Media. Munday reports on media explorations with elementary students in which they are challenged to find the best material to render a specific visual quality. In doing so, students are inventive in, and also reflective about, the different ways materials can be used.


Ruopp, A. (2003, January). Visual journaling. School Arts, pp. 36-37. Middle school students explore a variety of possibilities in visual journals inspired by Dan Eldon and Candy Jernigan. In this 12-week investigation, a variety of prompts were used to direct work in the journal, which began with personal reflections and resulted in more than 30 pages loaded with discoveries and insights. Article includes a description of the various assignments as well as Ruopp’s inspiration for the journals.

Smith, N. (1993). Experience and art: Teaching children to paint, 2nd Ed. New York: Teachers College Press. A methods resource book integrating theory with practice. Focuses on learning the elements, first representations, and picturing experience. This second edition includes contributions from colleagues who have continued Smith’s work that emphasizes the teacher’s active role in fostering a developing understanding of painting from ages 1 1/2 to 11.


Thompson, C. M. (1995). “What should I draw today?” Sketchbooks in early childhood. Art Education, 48 (5), 6-11. Four- and 5-year-olds are reported to respond positively to opportunities to work in a sketchbook format. Here drawing is a central activity. The sketchbooks present a “bounded area available for exploration of images and ideas, a format for the pursuit of personal projects and an occasion for sharing theories about the world and its representation through symbols” (p. 11).
BETTER PRACTICE
Teachers who structure conditions for creative thinking help students discover and understand more about the nature of creativity in the visual arts and its rewards.

THEORY
Artists, architects, writers, and scientists are among those whose personalities have been studied in order to determine what characterizes creative people (Arieti, 1976). A closer look at behaviors that distinguish creative people, rather than their personalities, has yielded an even more productive source for teaching for creativity. For example, research suggests that thought processes associated with artistic behaviors are characterized by self-knowledge, situated learning, fluid translation between media, empathy, integration and coherence, and use of analogy and metaphor (Stone, 1997). A number of considerations are useful in structuring processes that not only cultivate creative thinking but also allow learners to experience a high level of engagement and discover pleasures and rewards that can be found in the creative process (Perkins, 1981).
**Practice**

**Introductory Problems: More Closed than Open**

To build basic skills, whether with young children or a new area of learning, problems that are more “closed” than open can focus students on new skills, knowledge, concepts, techniques, processes, and ideas. Here, the solution to a problem will have more requirements, or constraints, than options. Yet all problems should leave some window of choice open so that students can make work personally meaningful (Kay, 1998).

**Focusing Creative Decision Making: The Role of Constraints and Limitations**

Constraints or limitations are the requirements that a solution to a problem must be honored. The purpose is to eliminate time lost in making too many decisions and thereby focus creative thinking within a narrow set of possibilities. Some theories of creativity support the notion that more creative solutions are generated by tighter constraints and limited options that force new thinking and problem solving. Many artists often give themselves problems with constraints so as to help focus their own work.

**Not Too Hard, Not Too Easy: The Role of a Task Well Matched to Ability**

Tasks or problems that are too easy produce boredom. If they are too hard, they produce frustration, even paralysis. Setting a problem so that it is neither too simple nor too hard, where the task meets with the ability level to result in appropriate level of challenge, appears to contribute to an optimal experience (Csikszentmihalyi, 1990).

**Not an Obvious Solution: The Role of Essential Questions**

The solution to a problem should not be obvious. At least, it should not be solvable without new thinking. Incorporating an essential or existential (self-referential) question into a problem asking, for example, not “what” is seen but “how” something is seen, can invite deeper thinking to occur (London, 2003; Castro, in press; McKenna, in press).

**More Advanced Problems: The Role of Open-Ended Problems**

As students gain familiarity with materials and processes, ideas and techniques, representational skills and stylistic options, they can make increasing use of problems with multiple options for decision making. The continuum of closed to open-ended problems also has a parallel in the progression from teacher-directed problems to student-generated ones. At the far end of the problem-solving continuum, students must both find a problem and develop their own constraints or limitations (Kay, 1998; Kowalchuk, 1999).

**Generating Ideas: The Role of Brainstorming, Visual and/or Verbal Workouts, and Play**

Brainstorming suspends prejudgment of ideas with the simple goal of generating more and more ideas. Best experienced as a kind of dynamic group participation game, it is a case of “the more the better” with the possibility that the most far-out ideas may suggest or point to the most creative solutions. Visual or verbal workouts can also be used to generate ideas through list making, inventories, questions, diagramming, mapping, sketching, and other forms of note taking. Play is yet another way of exploring the possibilities of ideas (Hamilton, 1998; Szekely, 1988, 1981).

**Developing Ideas: The Role of Synectic Thinking**

Synectic thinking affords many ways of working to develop an idea. Specifically, an idea can be changed by any number of strategies such as adding or subtracting, changing scale or shape, repeating, combining or transferring, exaggeration, abstraction or simplification, animation, substituting or disguising, distorting or fragmenting, isolating or mythologizing, fantasizing, symbolizing, analogizing, parodying, contradicting, prevaricating, metamorphosing, or hybridizing (Gordon, 1961; Roukes, 1988).

**Getting Ideas from Materials: The Role of Materials Investigation**

Ideas come from investigating materials and attending to their sensory qualities. Building a repertoire of ideas about materials—what they can do, what can be done with them, and how they fit with ideas—facilitates creative and artistic thinking (Burton, 1980). Experts or those with accumulated experiences with materials understand what will fail as well as what will succeed (Kay, 1998).

**Recording the Beginning of an Idea: The Role of a Holding Form**

Recording the germ of a motive, idea, hunch, or what can be called a “sensate impulse” about what a solution will look like serves to record how an idea began. Furthermore, such holding forms allow teachers to interact with the creative process in meaningful ways because they function as references for coaching and problem solving. Holding forms for an initial conception or idea for a solution may be recorded as a quick sketch, a three-dimensional model, a word, or a phrase (Arnheim, 1962; Carroll, 1985; Witkin, 1974).
OUTCOME III: FACILITATING ENGAGEMENT WITH THE ART-MAKING PROCESS

An Extended Process: The Role of Time and Immersion

Giving an idea time to develop and immersing oneself in the process of solving the problem allow for incubation, an important element in the creative process (Arieti, 1976). Stepping out of the process over a period of time so that new learning takes place about materials and forms, techniques and processes, concepts and skills, can help an idea percolate and develop. The experience of becoming totally immersed in creative work has been described as a state of flow in which time goes by quickly and engagement is highly focused (Csikszentmihalyi, 1990).

Digging In: The Role of Research, Investigation, and Hard Work

Work is involved in the creative process, and without it little of any consequence is produced. Research can be an important part of the process and reinforce the notion that new learning takes place in the process of making art. Hard work, as in problem solving with materials and crafting a solution, may require an investment of time and labor as well as thought. The exhilaration found in taking on an intellectually challenging task and the pleasures of working with one’s hand and mind reinforce notions about why artists find the creative process so engaging (Boot, 1995; Dissanayake, 1995; John-Steiner, 1987).

Stepping Back: The Role of Intuition

The creative process appears to involve both deliberate, focused attention and then moments of more intuitive thinking. In time away from the task, new solutions can present themselves within mundane, ordinary, or even semi-awake moments where the mind can muse and make its own connections. However, this kind of insight usually follows periods of intense investigation and focus (Arieti, 1976).

Pushing an Idea Through a Medium: The Role of Persistence in the Face of Not Knowing

In the artistic process of creation, an idea takes form in materials. The “shape of making” is a complex process involving problem solving, elaboration, development, and refinement (Perkins, 1981). What was an idea in concept of words, a sketch, or model, grows through the process of bringing it into a full and realized visual or spatial and/or time-based form (Wiktin, 1974). Often, persistence in the face of not really knowing how something will turn out, is required and becoming acquainted with this notion makes the journey of creating really worth the journey (Eisner, 1998a).

Challenging Oneself: The Role of Working at the Edge of One’s Expertise

If the creative process is about growth and development rather than processing the known within one’s comfort level with materials and ideas, then challenge becomes an issue. The level of risk-taking individuals are capable of varies greatly; some tend to stick closely to what they know and feel they can control; others are drawn to risk-taking. Learning how to make problems into opportunities and recognizing the value in discoveries made while working at the edge of one’s expertise can be important elements in—and rewards of—the creative process (Eisner, 1998b).

Moving Up to Another Level: The Role of Metaphorical and Conceptual Thinking

Literal thinking or taking ideas for their face value can limit creative thinking. On the other hand, thinking about ideas and possibilities from the point of view of a larger construct can often result in multiple levels of interpretation and meaning. Thus to think metaphorically about the literal or the observed, or to think conceptually about ideas, can both stimulate and focus creative work (Lakoff & Johnson, 1980; Simpson, 1998; Stone, 1997).
Some theories of creativity support the notion that more creative solutions are generated by tighter constraints and limited options that force new thinking and problem solving. Many artists often give themselves problems with constraints so as to help focus their own work.

**Tracking the Development of a Problem: The Role of the Process Portfolio**

Keeping a complete record of a creative process for inception and hunch through experiment, research and investigation, trial and error, failure and success, to completion, makes visible the creative process. Presenting all as a form of documentation shifts the focus from the final product to the fuller dimensions and dynamics of the creative process (Wolf & Pistone, 1995).

**Understanding Creative Processes: The Role of Reflection**

Reflecting on the creative process, especially if it has been well documented, provides raw material for thinking about how new thinking develops. All aspects of the process can be considered in understanding how new insights come about and the role of persistence, work, and problem solving in creative thinking. Reflection can further cause an examination of the rewards of pleasures of such engagement (John-Steiner, 1987).

**Appreciating Different Solutions: The Role of Assessment**

Self-assessment and group discussion can help identify different ways in which problems have been solved. Some solutions involve aesthetic organizing, others boundary pushing, inventing, or boundary breaking (Eisner, 1972). Some will arrive at solutions that need an explanation to understand how the problem was interpreted (Kay, 1998) while others will arrive at interesting solutions that have their own value, even if they solve a problem different from what was given.
OUTCOME III: FACILITATING ENGAGEMENT WITH THE ART-MAKING PROCESS

REFERENCES

Arieti, S. (1976). Creativity: The magic synthesis. New York: Basic Books. Arieti begins with a critique of major theories of creativity followed by a review of the psychological components of creativity and its manifestation in different products (wit, poetry, painting, music, religion, science, philosophy, and system theory). The relationships between the sociocultural environment and creativity as well as larger contexts are considered. Part 5 focuses on the creative person and how creativity might be cultivated.

Arnheim, R. (1962). The genesis of a painting: Picasso’s Guernica. Los Angeles: University of California Press. Arnheim’s analysis derives from documents including drawings and photographs that reveal the process that went into creating Guernica. Arnheim suggests that Picasso knew what he felt and meant through the process of moving from an initial sketch through successive stages of exploration, experimentation, and development to resolution and completion.

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper Collins. For two decades, Csikszentmihalyi has conducted studies on the states of optimal experience. He describes a state where there is a sense of strong alertness, effortless control, and unconscious decision making, all focused at the peak of one’s ability. Here one’s senses of time and emotional problems disappear and are replaced by an exhilarating feeling of transcendence.

Dissanayake, E. (1995, April/May). The pleasure and meaning of making. American Craft, pp. 40–45. Article explores several ideas, i.e., that making is not only pleasurable but meaningful; society can devalue making special, and to do so is to forfeit a critical component of our human nature, and that “making special” is a universal human practice in treating important life transitions with respect and care.


Eisner, E. (1998a). The misunderstood role of the arts in human development. In E. Eisner, The kind of schools we need: Personal essays. Portsmouth, NH: Heinemann. Essay examines five widely held but flawed beliefs about mind, knowledge, and intelligence that shape education. He follows by discussing what the arts can contribute to education, including the notion that the arts facilitate discovery.


Eisner, E. (1998b). Remarks upon receiving the Harold McGraw Jr. Prize in Education. Unpublished paper. Address giving an overview of the contributions the arts can make to education including the kind of experience the arts make possible, the kinds of meaning they generate, and the forms of thinking they foster.


Perkins, D. N. (1981). The mind’s best work. Cambridge, MA: Harvard University Press. Rather than an investigation of creative personalities, Perkins is intrigued by the process of creating that generates original and high-quality outcomes. He considers a number of propositions about creating and then explores ideas that suggest how these propositions might be revised. The book includes both theory and practical suggestions for experimenting with the process of creating. The chapter titles suggest the journey he constructs from witnessing invention to the consideration of creative moments, ways of the mind, critical moments, search, planning, lives of inquiry, “having it,” and the shape of making.

Wolf, D. P., & Pistone, N. (1995). Taking full measure: Rethinking assessment through the arts. New York: College Entrance Examination Board. Chapter 6 focuses on Portfolio Assessment and offers criteria for evaluating a process-folio in the visual arts. Criteria are organized into three categories: Production (craftsmanship, understanding, inventiveness, commitment, and expression); Reflection (sense of self as artist, critique, ability to use feedback); and Perception (ability to discern qualities in the work of other artists, visual/sensory perception of the environment, and cultural awareness). Each criterion is further qualified in the text (pp. 59-60).

RESEARCH

Emery, L. (1989). Believing in artistic making and thinking. Studies in Art Education, 30(4), 237–238. A cross-modal case study involving 10 students, ages 10 to 12, making observations of thinking processes when engaged in making tasks related to one of the arts. The notion of “belief” is “the catalytic quality in the artistic making and thinking process” (p. 237). This driving force compels the child to engage in art making given an unsolved problem and the opportunity to search for intention, play with form and image, and arrive at an expressive solution.

John-Steiner, V. (1987). Notebooks of the mind: Explorations of Thinking. New York: Harper and Row. An examination of the creative process based on interviews with more than 50 creative minds from different disciplines. Suggests that being creative involves a self-reflective process. Features highlighted by John-Steiner include long apprenticeships, continuous interaction of person and society, varied languages or modalities of creative thought, and sustained patient and disciplined hard work.

Kay, S. I. (1989). Differences in figural problem solving and problem-finding behavior among professional, semi-professional, and non-artists. Unpublished doctoral dissertation, Columbia University Teachers College. Quantitative and qualitative differences in performance were compared in three groups defined by their experience in producing ideas in art. Sixty adults participated in the study involving a dynamic assessment of the processes of solving a three-dimensional game-based art problem. Findings suggest that novices and experts demonstrated different behaviors with experts drawing on spatial versus linear modes of thinking.


drama. Wilkin identifies significant steps in the process: putting one’s inspirational idea (or sensate impulse) into a holding form and using it as a reference for checking original intent against options as the work unfolds; orchestration of work so that it proceeds through successive approximations in accord with the students needs; and issues of control over the medium are resolved, not shelved, as the sensate impulse is realized through the expressive medium.

REPORTS FROM PRACTICE

Boot, L. (1995). Personal conversation. In constructing a course for students in a specialized arts and technology high school, Lee Boot set as one of his goals the notion that students should know that adults take on intellectually challenging tasks and that doing so made them feel good. His research into brain theory supports this idea in that challenging tasks produce a chemical reaction in the brain that yields a sense of well-being, or better visual arts education.

Burton, J. (1980, September). Beginnings of artistic language. School Arts, pp. 6-12. Under the heading of “Concepts and artistry,” Burton discusses what she calls the “world of materials” through which pre-representational children encounter visual, relationship, and expressive concepts that form the basis of artistic language. With further explorations and experiments, children begin to develop a sense of the “fit” between ideas and materials or what ideas materials can accommodate.


MODELS FOR PRACTICE

Carroll, K. L. (1985, December). Monuments in clay. School Arts, pp. 32-35. Article describes a unit on clay monuments that was structured to stimulate thinking, provide a wide range of ideas, require personal reflection while practicing with the materials, bring forward the idea in a holding form (sketch, words, model), followed by the process of moving that idea into visual form. Creative thinking and problem solving came about from the dialogue between the idea in its holding form and the manner in which media interacted with it to give it final form.

Castro, J. C. (in press). Responding to existential questions: A holistic approach to teaching photography. In P. London (Ed.), A report from the study group for holistic art education. Baltimore: Center for Art Education at the Maryland Institute College of Art. Article discusses the use of existential questions as part of a holistic approach. The intent is to cause students to pause and engage in self-referential thinking before rushing too quickly toward predictable solutions to a given problem.


Kowalchuk, E. (1999). Recognizing and using higher order approaches to teaching. Art Education, 52(6), 13-18. Article begins by contrasting lower- and higher-order thinking in art. Suggests teachers start by examining ways to deepen learning by using generative topics and open and flexible problems. Discusses examples of how to transform a traditional portrait drawing unit by framing it in a larger context and beginning with aesthetic ideas.


McKenna, S. (in press). Assignment: Make art, make friends. In P. London (Ed.), A report from the study group for holistic art education. Baltimore: Center for Art Education at the Maryland Institute College of Art. Article reports interview strategies used to initiate a new assignment to make a homage to a new friend. Different kinds of questions generate information for creating a portrait sculpture.

Roukes, N. (1988). Design synectics. Worcester, MA: Davis Press. Roukes provides a cartoon as well as an explanation of the synectic process wherein two disparate ideas are brought together in a new whole. He also provides a model (a kind of pinball machine) for how many ways one can change an idea. Whole sections in his book are devoted to studio problems illustrated by work from artists and students.


Szekely, G. (1988). Encouraging creativity in art lessons. New York: Teachers College Press. Szekely is interested in the artist-teacher who serves as a catalyst for creating conditions that encourage students to use their own ideas for making art. He offers suggestions for helping children use their natural abilities; integrate their sensory, emotional and intellectual experiences; value their own personal feelings and ideas, and communicate them to others; and use art making as a way of exploring and understanding the world. Sections focus on introducing students to the art process, creating a classroom environment favorable to artistic learning, planning the lesson, evaluating and recognizing student performance, and becoming an artist-teacher.

Forming Elegant Problems

**Theory**

Different problems vary in the value they have. Some will provide great opportunities of elaboration while others might yield lots of creative and original ideas and solutions.

Nevertheless, an elegant problem must be worth doing and to do so, it must accommodate choices of a personal nature that make the art-making experience a meaningful and satisfying one.

Elegant problems, as defined by Kay (1998), have certain characteristics:

- The first characteristic is that learners with any level of ability can engage with the problem. This means that the problem is flexible enough so that beginning and advanced learners in the same class, or even learners from different ages or grades, might all be able to engage with the problem.

- The second characteristic is that a good problem will involve choice making. The problem will be sufficiently open ended to allow the learner to make choices that are personally meaningful.

- The third characteristic is that a good problem will spark original thinking.

**Better Practice**

Teachers who structure units around an elegant problem make it possible for learners at different levels of ability to engage with the problem while promoting choice making, originality, elaboration, and the creation of work that has personal meaning and value.
P R A C T I C E

Organizing Learning Around Big Ideas, Themes, and Metaphors

A unit of investigation can embrace large ideas that provide a context for an elegant problem. Artists often work with big ideas that sustain their work over long periods. Big ideas are broad, important issues. As such, they can direct and focus sustained artistic work. They can also help students understand that art making can express ideas of importance to them and others. Examples might include power, community, identity, nature, and conflict (Gardner, 1989; Walker, 2001).

Themes

Big ideas can also be thought of as themes. Themes are broad constructs that accommodate a wide range of ideas; they are also engaging and interesting for considering similarities and contrasts (Hayes-Jacobs, 1989; Perkins, 1989). Themes commonly pursued in art such as mother and child, love, war, loss, and family all come with sufficient and divergent exemplars to stimulate creative and personal problem solving.

Metaphors

Metaphors are constructs with coherent structure that highlight certain aspects and hide others, and are thus useful in making sense of experience. The essence of metaphor is understanding and experiencing one kind of thing in terms of another (Lakoff & Johnson, 1980). Examples might include gateways, monuments, vessels, containers, journey.
OUTCOME III: FACILITATING ENGAGEMENT WITH THE ART-MAKING PROCESS

REFERENCES


Burton argues for a learner-centered approach to education that invites students to bring their own experiences into the arena of learning and to reflect on and explore possibilities that engage students’ thinking. Further, students should be offered skills and insights in the arts where imagination can open up new corners of reality, helping them construct continuity between their creative efforts and the culture in which they live.


Discusses developmental theory and the curricular design of Arts Propel with its three main areas of focus — perception, production, and reflection — and its emphasis on student-directed problems; interaction; ongoing assessment; students measured against themselves; content that encourages decision making, problem solving, and personal revision; and a developmental process for learning in which all the pieces come together. Domain projects derive from one central visual concept or artistic problem that has multiple solutions, is accessible to various skill levels, and challenges students to explore and develop ideas, revise, and reflect.


A selection of essays related to integrating curriculum so as to provide opportunities for more relevant, less fragmented, and more stimulating experiences for students. Includes illustrations of interdisciplinary instruction and a model with a step-by-step approach for developing units of study.


Kay describes elegant problems with examples as well as supporting theory from the studies of creativity.


Book explores the role of concepts and metaphors in creating meaning out of lived experiences.


Discusses themes as "lenses" worth looking through and offers examples of three broad themes: change, dependence and independence, and patterns.


A theoretical exposition on creativity, processes, and production.

RESEARCH


Study based on 28 university students completing three projects with different levels of freedom of content choice. Findings suggest that efficacy, engagement, and unconscious engagement rose as the freedom of content choice increased. With that, there was increased likelihood of a gain in self-understanding.


A cross-modal case study of 10 children, ages 10 to 12, to make observations about their thinking processes when engaged in art-making tasks. Findings suggest artistic making and thinking involved a search process that children used to reconcile three main dimensions: social interaction, transformation, and representation. An unanticipated dimension that this research labeled “belief” was identified as a driving force in the process. It involves recognizing an unsolved problem, a search for intent, playful manipulation of forms and images, and arrival at an expressive solution.


A reflective examination of the evolution of an assignment over the course of three years. Designed for college-level academically underprepared students, a photomontage assignment yielded increasingly richer work under instruction that incorporated flexible but focused constraints; personal, social, and artistic relevance, practice with creative and metaphoric concepts and practices; expectations of complexity, ambiguity, and depth of meaning, and expressive and reflective writing.


Sixty adults participated in this research study that involved videotaped and reflective discussions of a three-dimensional task as well as other assessment instruments. Results were evaluated for expert versus novice differences.

MODELS FOR PRACTICE


Describes and illustrates a problem in clay that generated original, elaborate, and personally meaningful work among elementary-education majors working in clay for the first time.


Discusses a constructivist approach to designing conceptually based investigations.


Chapter contains suggestions for using concepts, themes, and social issues for organizing units that foster associations and connections among ideas, subjects, and disciplines. Several examples from different levels of instruction are described.


An examination of art-making processes in high schools including art and drama. Identifies significant steps in the process such as putting one’s inspirational idea into a holding form and using it as a reference for checking original intent against options as the work unfolds. The holding form may be a quick sketch, a word or phrase, a three-dimensional model, or any other form to which student and teacher can refer.


A methods book grounded in the practice of professional artists. Covers the role of big ideas in art making; making personal connections with art making, building a knowledge base for art making, strategies for problem solving, the role of setting boundaries for art making, models for art-making units, and a look at the practices of artists.
Designing Problems Based on the Real World of Work

THEORY
Both the business world and art educators have noted the way in which the visual arts are uniquely appropriate in producing future workers who are multiskilled, multidimensional, flexible, and intellectually supple. The arts foster awareness that problems can have multiple solutions. In addition, the arts develop abilities to perceive relationships, attend to nuances, shift aims, make decisions in the absence of rule, use imagination as a source of content, operate within the constraints of a medium, and frame the world from an aesthetic perspective (Eisner, 1997).

BETTER PRACTICE
Teachers who draw problems from the real world of work in the visual arts develop a wide range of valuable skills in their students while exposing their students to future career options.

Design instruction has had a presence in art education since the late 1800s. While design instruction has changed in scope and purpose, 21st-century designers face issues that involve the flow of information, management of finite resources, and creation of flexible, lasting design (Vande Zande, 2002). The U. S. Department of Labor (1991) identified five competencies and a three-part foundation critical to the workplace of the 21st century. The report described effective workers as those who can productively use:

- Resources—allocating time, money, materials, space, and staff.
- Interpersonal Skills—working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds.
- Information—acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information.
- Systems—understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems.
- Technology—selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies.
- Basic Skills—reading, writing, arithmetic and mathematics, speaking, and listening.
- Thinking Skills—thinking creatively, making decisions, solving problems, seeing things in the mind’s eye, knowing how to learn, and reasoning.
- Personal Qualities—individual responsibility, self-esteem, sociability, self-management, and integrity.
Problem-based learning integrates creative thinking to arrive at solutions. It is adaptable to a collaborative or team effort. (For more on characteristics of problem-based learning, see the entry under that title in Outcome IV.)

Authentic problems result in real products to be realized in a public or private venue. One example reported by a high school teacher was a student-designed billboard project where selected entries were produced and mounted in the city.

Simulations are modeled after real-world problems and may include role-playing. For example, a middle school teacher set up a fictional company as a way of launching a design-based problem. He developed an application process for “new hires” that required a sample of their creative thinking as well as some reflective questions followed by an interview process that students ultimately took over, playing the roles of company owner, secretary, and videographer. New hires signed contracts with expectations and agreements and accepted an assignment to develop a new prototype for production. Various goods produced over the years included shoes, watches, skateboards, surfboards, and other items of special interest to eighth graders. Prototypes were generally made of clay. Possible extensions of this simulation involved packaging design and advertising materials (Katz, 2002).

Design-based problems offer a wide range of possibilities for rethinking and redesigning objects that fascinate students, reconceptualizing environments, proposing new projects, and inventing new solutions. For example, a show of design-based work from K-12 students featured more than 30 different kinds of objects including lamps, clocks, coins, seals, stamps, books, containers, banners, chairs, tables, wind chimes, tools, birdhouses, weather vanes, quilts, flying machines, vehicles for the future, pinhole cameras, watches, skateboards, sneakers, and toys (Howard County Schools, 2000).

The visual display of complex information and evidence represents another area of design work applicable to all fields of endeavor. Visual thinking strategies can be employed in gathering ideas and planning, observing and recording information and making connections, displaying information, and reflecting and assessing. Hamilton (1998) provides classroom examples using clustering, webbing, mapping, charting, graphing, different kinds of diagrams, and informational sketches. Strategies for visualizing change processes are also included, with examples of transformations, metamorphosis, metaphor, and analogy. All can apply to problem solving, redesign of information systems, and the visual display of complex phenomena.

**Recommended Strategies**

Incorporate design-based problems as a regular part of the K-12 curriculum.

Involve students in identifying unsolved problems in their school or community that might be resolved through design.

Have students develop a list of the “consumer goods” that interest them and why; engage them in a critique of existing versions, and generate ideas for improving the product.

Have students identify areas of investigation that might benefit from the visual display of complex information such as encountered in science, history, and other disciplines.

Fashion problems based on the real world of work; simulate real problems and/or get students involved with authentic problems in their community.

Allow students to assume different roles in teamwork as suits their interests and abilities.

Introduce visual strategies as tools for creative thinking and problem solving.

Introduce students to outstanding designers from different fields.

Bring designers and other art professionals into the classroom.

Organize design-based exhibitions to make this portion of the curriculum visible to a broader public.
OUTCOME III: FACILITATING ENGAGEMENT WITH THE ART-MAKING PROCESS

REFERENCES


Article contains excerpts from Eisner’s address for the conference “Educating for the Workplace through the Arts” sponsored by the Getty in cooperation with Business Week. It features a brief discussion of eight key competencies of cognitive growth that are developed through an education in the arts.


This report identifies significant changes in the workplace of the 21st century, such as strategies, production, hiring and human resources, job ladders, and training. The report discusses implications for education including desired competencies and foundational skills.


These sources illustrate how complex information can be displayed visually to reveal movement through time and space showing magnitude. The author, who is a designer and sculptor, argues that visual display and presentation of multidimensional evidence are needed in order to understand complex phenomena in any field of study.

RESEARCH


An examination of the thinking processes, purposes, and goals of design historians and practitioners and art education design practices and philosophies. Findings direct attention to the issues contemporary designers face and the relevance of these concepts today.

REPORTS FROM PRACTICE


Reports on a project in Scotland where a university instructor and college students worked with 20 young people and a number of agencies to identify a local environmental problem in the Glasgow area. Article recounts how workshops and design teams generated ideas for a model play area. Even though the report only follows the project through the proposal stage (funding is still being sought), it models how artists, designers, and architects can interact with schools and community groups in purposeful ways.


Article reports on a college-level experience modeled after Wigginton’s “Foxfire method” for exploring the community. Ulbricht organized investigations of four categories of the arts landscape: expressive artists, commercial artists, support people, and community-based artists. An interview with a representative of each category was modeled with a guest in class, and then students identified others in the community to interview. Students discovered a great deal about how the arts form an integral part of culture, the number of types of jobs, and interesting details about the jobs.

MODELS FOR PRACTICE


Chapter 6 provides an inventory of visual strategies. Examples illustrate their application to a wide variety of questions and data. Applications to different disciplines are discussed.

Howard County Art Teachers and Students. (2000). Designing artful problems with real world applications. Exhibition at the Howard County Center for the Arts, Maryland.

Art supervisor Barry Shauck initiated an investigation of real-world problems by providing in-service training with designers and art educators focused on design problems early in the fall of 1999. The exhibition, mounted the following spring, included design solutions created by K-12 students.


The problem is a simulation of the real world of work that incorporates applying for a job, creating a work sample to demonstrate creative thinking, an interview and hiring process, making a prototype, and more. The problem has been adapted to various objects of interest among eighth graders including shoes, watches, and skateboards.
Facilitating Dialogue and Discourse About Student Work

**THEORY**
Dialogues about student work may be one-on-one with a teacher, small group conversations, or large group dialogues. Frequent critical dialogues with students about their artwork, in progress or completed, characterizes programs where secondary students produce higher quality work (Dorn, 1983). Yet negative connotations are often ascribed to the term “critique.” Many art students have painful memories of critiques, perhaps due to a lack of clarity in the purpose of the critique and/or the lack of processes that were clearly constructive and positive.

Defensive or aggressive behaviors, such as excessive verbal justifications of work, negative remarks, and premature closure of conversations, can create problems. If such dialogues are to be productive, clarification of purpose and selection of appropriate processes for guiding and stimulating participation focused on the work are important steps.

To best serve the student-artist, teachers should first consider the purpose of a critique or critical dialogue. Often the assumed purpose of a critique is judgment. Judging work in a public context can prove problematic, especially for student artists. For example, a conversation assumed to be about judging the work can come to a complete standstill with comments such as “I like it the way it is.” If the critique is assumed to be about identifying the artist’s intent, the conversation may stall around comments such as “This is what I meant.” If either judgment or intent is the issue, the critique may not necessarily be the best solution. (See the entry on assessment in the first section on the Overview of Better Practice and the entry on reflection in the section on Outcome I.)

However, if the goal is to consider what meanings might be found in
the work, an “object-based” critique or a dialogue may well suit the purpose. Here the work becomes the basis for a dialogue in which opinion and intent are irrelevant. Instead, the focus falls on meanings that might be associated with the choices the artist has made (Matzko, 2002). With the focus clearly on the work, both artist and viewers can begin to think about the effect of artistic decisions on meaning, including investment, development, originality, elaboration, and choices of materials and form, as well as deliberate and intuitive decisions.

Some teachers also want to create a learning environment that cultivates a sense of community and mutual support. Critical dialogues in which students help each other discover meaning in their work can support personal and artistic growth as well as the development of interaction, empathy, and deeper understanding among a peer group. Additionally, students can gain respect for the processes and value of making and responding to art.

Facilitating dialogues about artworks requires both clarifications of purpose and guidelines for participation. For example, in a holistic approach to making art, it is assumed that all work will be taken seriously with high regard. Neither judgment nor intent is an issue. The sharing of work might begin with the artist in control of the conversation, able to choose between telling the story of the work and hearing first what responses it generates. Different forms of response might be used including a dialogue modeled by the teacher with one or more students, peer sharing, small group discussions, or large group conversations. Responses might range from verbal responses to creative writing and oral recitation. Sometimes the work may inspire silence or even applause (London, 2000).

Often, the work can be more fully considered if time is taken to describe it. Discussions can identify relationships among choices of materials, subject matter, and visual qualities. Meanings associated with such choices can then be considered. The work can even be thought of in terms of its value, that is, the ideas and feelings engendered or aroused, the qualitative experience created by the work, the connections evoked among viewers, and the manner in which new thinking about issues, concerns, experience is stimulated.

In an in-process critique, which seeks to provide feedback and suggestions that will positively affect the manner in which the work is completed, students can “read” works back to their peers. A PQP process sometimes helps: some praise, a question, and an idea or suggestion for polishing the work.

If the purpose is to consider how students are going about solving a particular problem, the dialogue can begin with a restatement of the problem and its parameters as set by the teacher or the student. All should remain open to the possibility that some students will solve problems in totally unique and unpredicted ways. Further, some may also do something interesting that does not fit the criteria but can be recognized for the value inherent in it.

Getting students to talk in front of the class may take some practice. Teachers can model the kind of responses they want to develop. Developing relevant vocabulary is essential (Barrett, 1997). Strategies that take away the pressure of speaking cold before one’s peers can help. Allowing students to try out ideas first with another student will give them more confidence in airing their ideas before the whole class. For example, pairs of students can look for work that meets certain criteria and together figure out how to talk about it. Small groups can list different ways the problem was solved or identify different thematic variations. Students can be invited to work with a peer to select and respond to a work that has captured their attention. All students might be required to make a number of verbal contributions. This strategy, combined with calling upon students, with an option of taking a pass, can reinforce the notions that all have something valuable to say and that a productive dialogue is the responsibility of the entire group (Matzko, 2002).

Barrett (1997) reports that it is possible to engage students in serious and thoughtful discussion. He begins with the observation that any group of students who have not had some
experience in talking about art must learn the basic principles of art. Among his introductory suggestions (pp. 4-5) are the following strategies:

- Place primary responsibility for talking during the critique on the viewers of the artwork.
- Be a facilitator of thoughtful discussions, preventing random, unconnected, and ill-conceived comments.
- Carefully formulate questions, and, when necessary, redirect answers.
- Place more emphasis on interpretation than evaluation.
- Include description as part of the process, but consider starting with an interpretive question and then asking for description that supports it.

Following the presentation and reflective discussion of a whole collection of sample critiques transcribed from real exchanges with students at a variety of levels and in different settings, Barrett concludes by offering the following suggestions (pp. 94-95), which appear here in an abbreviated form:

- If this way of teaching is new to you, start from your strengths. Start with a strong class and the students’ best art project.
- Concentrate on being a facilitator rather than a critic.
- Sometimes allow students to choose what artworks to discuss.
- Don’t feel obliged to discuss the work of every student every time.
- Extend students’ comments.
- Try to get everyone involved.
- See that no one dominates the discussion.
- Pursue answers with follow-up questions.
- Keep the artist’s input to a minimum.
- Have speakers comment to the class, not the artist.

Consideration should be given to discussion of difficult work in which controversial or violent imagery is used. Truly authentic work is likely to include references to life experiences and social conditions that may reflect loss, injury, vulnerability, abuse, violence, and tragedy. Talking about such works, on a one-on-one basis or within the context of a group, requires thoughtful strategies and guidelines (Diket & Mucha, 2002).

Frequent critical dialogues with students about their artwork, in progress or completed, characterizes programs where secondary students produce higher quality work.
RESEARCH

Baker, W. D. (2001). Artists in the making: An ethnographic investigation of discourse and literate practices as disciplinary processes in a high school Advanced Placement Studio Art classroom. A descriptive and analytical participant-observer study designed to examine the role of discourse as a socially constructed process within a community of AP students. Findings suggest that the collaborative construction of a metadiscourse, among students and with other teachers, can make visible what counts as situated disciplinary knowledge.

Barrett, T. (1988). A comparison of the goals of studio professors conducting critiques and art education goals for teaching criticism. Studies in Art Education 30(1), 22-27. Study involved 19 professors of studio art who were interviewed by art education majors using a set of open-ended questions about critiques, how often and how they conducted them, their goals, and differences between good and bad critiques. Findings suggest that studio professors use critiques for the improvement of the art making of their students. This contrasts with notions about criticism, as presented in art education, as a means to more informed talk about art.

Dorn, C. (1983). Unpublished study. Site visits to high school programs that had track records of high scores on Advanced Placement exams were used to identify contributing factors. Frequent use of critical dialogues was among the most common.

Dozois, P. S. M. (2001). Construction through critique: The dialogic form of design studio teaching and learning. Unpublished dissertation, University of Manitoba (Canada). MAI, 40, no. 03, p. 522/. Literature review that suggests the critique is fundamentally a dialogic act that involves but is not limited to interaction between a novice and a domain expert. As a shared and constructive act, it can guide “meaning-making” or intentionality in student’s work.

Soep, E. M. (2000). To make things with words: Critique and the art of production. Unpublished doctoral dissertation, Stanford University. Study asserts that “passing judgment” can operate as mutual deliberation through the practice of critique. Ethnographic techniques and discourse analysis were used served to study the use of critique in two non-school centers for youth. Its distinguishing characteristics, contributions and constraints, supportive contexts, and linguistic qualities were examined and evaluated in terms of learning theory.

REPORTS FROM PRACTICE

Barrett, T. (1997. Talking about student art. Worcester, MA: Davis Press. Barrett reports strategies he personally used to teach different examples of lessons, discussing how the lessons proceeded and critical reflections on when they went in productive directions and when they did not. Appendix includes sample worksheets for interpreting art and for engaging an artist and a viewer in a conversation in which artistic intent can be compared with interpretation.


Matzko, C. (2002). Object-based criticism. A presentation for the College Teaching of Art course at the Maryland Institute College of Art. As a preface to discussing object-based criticism, Matzko begins with a consideration of the purpose of an educational program in the visual arts and different assumptions about how meanings are culturally represented. She suggests that artists can be thought of as “cultural producers.” Further, “cultural meanings” are not fixed but negotiated in a public sphere. In what she calls a “constructivist” mode, the goal of a critical dialogue is to establish a sense of the meanings that can be derived from choices made by the artists.

Diket, R. M., & Mucha, L. G. (2002). Talking about violent images. Art Education, 55 (2), 11-17. The authors encourage teachers to attend closely to the images students make, consider them thoughtfully, and make time to talk about understanding a volatile world. They offer a structure for talking about art that considers both the artist’s and viewer’s ideas. This flexible model accommodates following thought patterns, decoding symbols, and interacting with teenagers about violent images that keep the frame of reference centered on the images. Also included are stories about personal encounters and reflections that illustrate different scenarios one might confront.
OUTCOME IV

Facilitating Critical and Aesthetic Inquiry

Engaging Students with Art Objects
Orchestrating Conversations about Art
Employing Storytelling and Puzzle Problems
Using Interpretive Strategies to Find Meaning
Promoting Critical Thinking through Problem-Based Inquiry
Facilitating Student-Curated Exhibitions
Using Models for Writing about Art
Making Art Inspired by the Study of Art
Engaging Students With Art Objects

**THEORY**

Teachers engage learners with objects for different reasons (Lim, 2000; Elliott, 1999; Murray, 2001). Teachers can better shape engagement if they are aware, in the first place, of their implicit and explicit purposes and goals for doing so (Elliott, 1999). Findings in cognitive psychology also suggest that choosing images in terms of developmental interests and skills is important (Yenawine, 2003). Organizing works by broad themes can also be useful in focusing engagement and inquiry (Erickson, 2001). Works that have ambiguity require higher levels of critical thinking (Leshnoff, 1995).

Active engagement strategies draw upon a variety of modes of thought and response. They often call upon intuitive, imaginative, emotional, and/or physical responses to focus or heighten engagement. Appropriately selected and employed, such strategies can create pathways through which students can enter works of art. Once engaged, students can be moved to other levels of discourse and inquiry. Strategies encompass visual analysis, sound and movement explorations, creative dramatics, creative writing, and games.

**BETTER PRACTICE**

Teachers who employ active strategies to engage learners with objects facilitate sensory involvement and personal response, preparing for the development of skills and concepts.

**PRACTICE**

Engagement with art objects involves matching goals with appropriate strategies and selected artwork. Goals may include development of perceptual awareness, sensory awareness, verbal language, cognitive concepts, art concepts, ideas, and self-concept. The following strategies are non-verbal in nature. (For engaging learners in talk about art, see the next entry.)

**Visual Analysis**

Visual strategies have proven useful in analyzing and responding to art. They can identify underlying structures in an image, uncover a pattern made by the forms in an image, and make clear the use of contrast, color, and/or movement. Using visual strategies to study images figured in the curriculum at the Bauhaus by Itten (1963/1975) and has been endorsed in art education practice by contemporary authors (Hurwitz & Madeja, 1977; Wilson, et al., 1987).

**Suggestions for Using Visual Analysis Strategies**

- Use “tools” to isolate or examine parts (telescopes, viewfinders, magnifying lenses).
- Use diagramming or tracing to identify underlying structures (tracing paper on reproductions, tracing through projected images).
- Create studies to find patterns (light-dark contrasts, shapes, lines, and other formal qualities).
- Sort and categorize images to find similarities and differences based on different criteria (subject matter, style, theme, formal qualities).
- Draw the work or make visual notations as a warm-up for talking or writing about art.
Describe the work to another well enough to develop a mental image or a drawn one.

**Sound and Movement Strategies**

Herman and Hollingsworth (1992) identify four major benefits of kinesthetic learning, or learning that involves sensing or feeling the motion: Kinesthetic learning strengthens memory, enriches conceptualization and deepens understanding, promotes creativity, and expands the potential for aesthetic communication.

Using language and vocabulary developed for dance by Rudolf Laban, Herman and Hollingworth provide a model for exploring time, space, force, flow, and effort — in sound, movement, and art. The concepts correspond to visual and spatial concepts found in the visual arts (for example, see Townley, 1979, or Roukes, 1988) and provide a movement and sound vocabulary for responding to works of art. Kinesthetic strategies help students experience their own multisensory responsiveness to the visual arts that involves the whole body and mind.

**Suggestions for Using Sound and Movement Strategies**

- Have young children practice acting out various visual concepts; using contrasting opposites can help students understand concepts such as spiral and concentric, straight and curved, rough and smooth, quick and slow, light and heavy.
- Introduce students to movement and sound concepts, exploring time, space, force, flow, and effort.
- Develop a sound vocabulary using vocal improvisation and with simple instruments that corresponds to visual concepts by exploring possibilities.
- Develop a kinesthetic vocabulary exploring movement with hands, heads, and whole bodies that corresponds to visual concepts.
- Practice having the class respond to works of art using sound, movement, and combinations of the two; students can practice with partners and take turns performing for the class.
- Conduct a performance with students providing sound patterns that correspond to sections of a visual image.

**Categories, Verbal Cues, and Search Strategies**

Perceptive-evaluative sequences involve the use of perceptual categories, cues, and search strategies. As students are likely to have only a few, broad categories and a meager array of cues with which to think about art, this approach provides new knowledge, and opportunities to sort, classify, and defend decisions.

**Suggestions for Using Categories, Verbal Cues, and Search Strategies**

- Introduce an expanded range of possible perceptual categories and describe them thoroughly. The categories might be drawn from styles of art such as Feldman’s (1987) functions of art (Personal, Social, and Physical) or his four styles of art (Objective Accuracy, Formal Order, Emotionalism, and Fantasy). Categories might be drawn from theories of art such as Mimesis, Expressionism, and Formalism (Hurwitz & Day, 2001). Broad themes can also be used to select works for study (Erickson, 2001).
- Category specifications or cues should be identified. They might be enumerated by the teacher or deduced by students. Students can use search strategies to isolate pertinent cues.
- Students can then classify artworks according to the categories, matching cues with category specifications.
- Explaining the reasoning behind classifications allows students to identify cues that figured in their decisions.
- Outside references might be consulted to determine the adequacy of student decisions. Such sources might include art historical writings, essays on aesthetics, and examples of art criticism.

**Strategies from Creative Dramatics**

Finding drama in artworks allows students to physicalize characters, actions, interactions, and positions, while imagining or inventing dialogue or imagery, and events leading up to or coming next.

**Suggestions for Using Creative Dramatics**

- Recast figures with classmates, re-enacting or recreating scenes.
- Invent dialogue for characters (who is the character, what would the character say or think).
- Role-playing, creating action and dialogue, before and after, to develop an awareness of drama portrayed visually.

**Strategies from Creative Writing**

Moving among symbol systems, alternating between words and images, allows one mode of thought and expression to
OUTCOME IV: FACILITATING CRITICAL AND AESTHETIC INQUIRY

Inform and/or respond to the other. Because letter writing encourages reflection and introspection, it expresses personal observations in an informal voice. Poetry forms encourage word choice, and attention to sound, structure, and sequence, thus serving to bring forth intuitive and emotive responses.

Suggestions for Using Creative Writing

- Write a letter, describing or telling another about art or sharing the experience of a work with another.
- Write a letter to the artist or imagine oneself as the artist who is writing a letter about the work.
- Write poetry in response to imagery in order to spark word association, sounds, sensory responses, and metaphor.

Game Strategies

The varied nature of art games and simulations is broad enough to support different claims about their benefits. Among the suggested benefits are (1) improved student interest, (2) the potential for increasing student retention of subject matter because of practice and application of knowledge, (3) reinforcement of prior learning, (4) visual problem-solving skills, and (5) increased visual discrimination. However, it should be noted that Katter (1988) and Susi (1988) have been careful not to claim that educational games are a better way of teaching than conventional teaching procedures.

Suggestions for Using Game Strategies

- Games and simulations should have art content that is relevant to what students are expected to learn about artistic skills, aesthetic values, aesthetic issues, historical facts, and critical inquiry.
- Game structures should be simple with explicit rules. Games may be for individuals or groups of players, but they should keep their instructional character so that all students learn from them, not just the winners.
- Simulations should derive from a realistic model to encourage a high degree of involvement among participants. They should include abundant information about a specific phenomenon and encourage the application of this knowledge to the situation presented by the simulation.
- Debriefing is an essential step in the learning process. Through skillful questioning, teachers can help students clarify and make sense of issues and problems encountered in the play.

References


Itten, J. (1963/1975). Design and form: The basic course at the Bauhaus and later, Revised ed. New York: Van Nostrand. A visual record of the basic course as developed by Itten, illustrated with examples of student art and photographs. Components of the curriculum are explained.

Leshnoff, S. (1995). Art, ambiguity, and cultural thinking. Art Education, 48 (5), 51-56. Article models the use of two artworks for critical examination, one a historical example, the other a contemporary one. Suggests artworks that present uncertainty offer material for generating good thinking habits.

Mittler, G. A. (1983). Clarifying the decision-making process in art. Studies in Art Education, 25 (1), 14-22. Mittler cites Bruner’s work in perception and Sherif and Sherif’s work on attitude to develop a carefully constructed deductive strategy for teaching students to make well-founded decisions about art. Recommends that teachers provide students with an increased number of perceptual categories with which to look at art; they would make students aware of specifications for each category, and the act of making decisions would then sharpen perceptual skills.


Yenawine, P. (2003). Jump starting visual literacy: Thoughts on image selection. Art Education, 56 (1), 6-12. Building on the research of cognitive psychologist Abigail Housen, Yenawine recommends a thoughtful process for selecting images for novice viewers. He refers to three stages of aesthetic development: Accountive Viewers, Constructive Viewers, and Classifying Viewers. Among considerations for selection, he includes accessibility, captivation, expressive content, narrative, diversity, realism, media, subjects, sequences, series, and themes. He follows with “things to avoid” as well as specific considerations for younger viewers and viewers with some experience.
Research

Lim, B. Y. (2000). Aesthetic education for young children in three early childhood settings: Bank Street, Reggio Emilia, and Waldorf. Unpublished doctoral dissertation, Columbia University Teachers College. Non-participatory observation and data analysis were used to identify educators’ perceptions of aesthetic education and ways to implement it in the classroom. Findings suggest that perceptions were deeply rooted in philosophic views of the child while loosely connected to aesthetic theories. An emerging aesthetic paradigm for early childhood education covers a large area, including art, music, movement, story, poem, and play.

Erickson, M. (2001). Images of me: Why broad themes? Why focus on General Sources MODELS FOR PRACTICE temporary imagery with the world they know. The software used morphing to study the correspondence between photographs of subject matter with contemporary painting. A practical guide for exploring art through movement, sound, and action. Models activities and discussions. Since Zephyr Press is a direct-mail publisher, copies can be obtained by calling 602-322-5090.

Stewart, M. G. (1997). Thinking through aesthetics. Worcester, MA: Davis Press. Chapter 5 offers practical inquiry-based activities including great debates, role-playing, questions in the air, object ranking, token response, stories, and other writing. All are presented with practical suggestions for implementation.

Murray, T. (2001). Using education art criticism to enhance self-concept in students with emotional and behavioral problems. Unpublished doctoral dissertation, the Florida State University. This quasi-experimental research study including quantitative and qualitative data suggests that a given model may have been effective in enhancing or stabilizing the self-concept of students with emotional disabilities.

Tsamasiros, K. (1998). Using interactive multimedia software to improve cognition of complex imagery in adolescents. Unpublished doctoral dissertation, Concordia University Canada. A special software, Active Modern Art History, was designed as a presentation device for complex images. The software used morphing to study the correspondence between photographs of subject matter with contemporary painting. In field testing, the software appears to have helped students associate contemporary imagery with the world they know.

Models for Practice

General Sources


In addition to identifying a number of internet sources, Erickson uses one example to illustrate how a theme in art can be used for both inquiring about works of art and for transfer of knowledge to making art. Models for inquiry questions are also provided.


Sound and Movement Strategies


Townley, M. (1979). Another look. Menlo Park, CA: Addison-Wesley. A curriculum designed for early childhood exploring visual concepts and themes in art. Teachers’ Editions contain scripted lessons that incorporate sorting and categorizing, word play, acting out, and other strategies. (As the materials are currently out of print, contact the Center for Art Education at the Maryland Institute for source information.)

Game Strategies


Cardinale, R. L., & Anderson, F. E. (1979). Art games and learning problems – or what does a tall, courageous, prickly ear look like? Art Education, 32 (1), 17-19. These authors suggest that art games can help remediate a range of visual perception problems special education students may have. However, they point out that all students need to learn these skills, asserting that art games can be valuable tools for all students. The authors describe eExamples of games are described.


Stewart, M. G. (1997). Thinking through aesthetics. Worcester, MA: Davis Press. Chapter 5 offers practical inquiry-based activities including great debates, role-playing, questions in the air, object ranking, token response, stories, and other writing. All are presented with practical suggestions for implementation.
Orchestrating Conversations About Art

THEORY

Discussions of art can be characterized as interactive and inductive due to the manner in which response is constructed. They can also be thought of as empathetic when there is an effort to connect what is observed with the viewer’s own world of experience (Anderson, 1986). Understanding art transforms both the viewer and the subject through the involvement of cognitive, physical, and affective domains (Siskar, 2000; Salander, 2001).

Carefully framed teacher questioning can increase student thinking and verbalization about observations, concepts, and generalizations. When students are encouraged to sensitively observe individual objects—such as artworks—and their environment and to organize the mass of their observations into categories (thus identifying concepts), they can (1) select from the organized, broader base of information that which will be useful in solving-problems and (2) synthesize the concepts into a product or big idea (generalization).

Criteria for categories of questions include clear definitions appropriate to the subject matter (making art or perceiving art) and thoughtful examination to determine that they will in fact fulfill the intent of the instruction. Three categories of questions are particularly pertinent for art education.

Information questions facilitate discrimination by directing students to visually and tactiley examine properties they find in artworks and other objects in their environment and to describe what they have observed. Students may be asked to describe that which they are observing at the moment or something that they recall. An example of an informational question is: How would you describe the edges of the shapes in this painting?

Leading questions enable concept development by asking students to sort what they have observed (that is, what they learned from
the informational questions) into categories. Students are asked to relate, cite similarities, classify, sort, and reorder. An example of a leading question might be:

Among the lines that you have found in the drawing, which are the most delicate and which are the boldest?

Synthesizing questions encourage students to form generalizations by having them recall and apply previously learned concepts. Students would be asked to verbally explain, state conclusions, and critique. Generalizations would be applied either to the product students will make (or are in the process of making) or to artworks they are examining. An example of a synthesizing question could be: How might what you have learned about joining pieces of clay together be used in this piece of sculpture?

These categories of questions are hierarchical. What is learned from informational questions forms the basis for concepts that result from leading questions. Generalizations that are generated by synthesizing questions are dependent on what has been gained from previously learned concepts.

Engaging students in forming their own questions involves students in conscious and deliberate ways of thinking. Schwartz and Millar (1992) recommend a “Management of Information Model” with three stages:

Gathering information and data or understanding including factual questions such as who, when, where, what, and how, and procedural questions such as what and how.

Organizing and clarifying information or understanding using objective questions such as why, what, and how, and assumptive questions such as would, and why.

Extending or creating information or understanding with hypothetical and speculative questions such as what next, what if, and I wonder if.

Engaging students in a dialogue develops listening skills as well as empathetic social interaction among viewers (Jeffers, 2003).

Encouraging students to share the stories they can tell about artwork viewed together helps reinforce the idea that people can see things differently and find different meanings in artworks.
RESEARCH

Studies by Koroscik (1982) and Marschalek (1983) report that viewers remember more about specific works when they have longer periods of time to examine them. Koroscik and Blinn (1983) found that creating an appropriate title for an artwork increased the amount of information about the work that was processed and remembered. Training to focus on the idea, organization of the art elements, and sensory qualities of artworks increase the number of descriptive comments that viewers will make about artworks (Hysell, 1973). In short, viewing time, training, and verbalization all seem to positively influence experiences with works of art. Further, evidence points to a developmental pattern in which older students are capable of more efficient and perceptive looking (Marschalek, 1983, 1986a, 1986b).

PRACTICE

Recommended Strategies

Structured or directed discussions of artwork often employ a sequence of steps that promote a certain degree of objectivity and responsiveness prior to drawing conclusions.

Often the process begins with what students can notice, as in Broudy’s (1987) aesthetic scanning, or with an inventory-like description as in Feldman’s (1970) four-step process for art criticism. The intent is to slow down the eye and to buy time in looking and getting acquainted with an image.

Analysis, in which relationships are found among formal qualities, subject matter, and their combinations with each other, media, and format, provide a second step for considering the interplay and interaction of various dimensions of the work.

Interpretation or speculation, if based upon description and analysis, will reveal the manner in which students make connections between their own worlds of experience and the art under examination.

Valuing, rather than evaluation, suggests that students consider the value of the work to them, what it reminds them of, what it helps them think about, and what it may demonstrate, model, or teach. Students may also consider ways in which the work succeeds or how it is special or unique.

In the authors’ original conceptions, such formal discussions were concluded at this point without considering more about the context out of which the work came and what additional insights might be gathered through research. Hurwitz (2001) recommends that the conversation be continued in order to get to another level of evidence, ideas, concepts, and understanding. Prater (2003) has suggested that modifying the formal process by inclusion of contextual information and theories of art generates more thoughtful insights and connections.

Yenawine (1996), modeling Visual Thinking Strategies (VTS) in a museum, begins conversations with a question: “What do you see?” In a similar way, he uses a discovery method to make connections between students’ lived knowledge and art. He acknowledges that art is still a new experience for most students and that there is plenty of room in art for interpretation. While some information can’t be learned from the object, he waits until he is asked to provide it.

In his practice of refining questioning techniques, he starts with a leading question such as “What is the story of this picture?” or “What might this be about?” By repeating answers, he rephrases student responses to help identify key points. He probes further by asking: What do you see that makes you say that? or “What do you mean by...? “Let’s talk more about that,” or “Think about that for a moment.” He accepts all answers as long as students can say why that’s the case. He may challenge answers to see if anyone sees anything different, ask for consensus, or raise the question about something making sense in terms of the whole picture.

Yenawine observes that elementary students find stories that relate to their own lives while high school students are more willing to move beyond concrete reality to symbolic ideas motivating a picture. He notes that it is a challenge to keep up with open-ended responses, to pace the conversation, and to know what kind of information to apply.

Perkins (1994) frames a similar process with the notion that art is an occasion for intelligence. In his book The Intelligent Eye, he reports: “We began with giving looking time, simply looking, keeping engaged, giving the work a chance to show itself to us. We continued by making our looking broader and more adventurous by looking for physical feel, meaning, surprise, mode, and motion. And we went on to problem a specific puzzle: What actually is reflected?” (p. 74). While not overly concerned about order, he points out that there is a certain grace to this
Carefully framed teacher questioning can increase student thinking and verbalization about observations, concepts, and generalizations.

progression that concludes with a kind of re-experiencing the work, “marshaling all you have discovered” (p. 74).

Thus in a fashion similar to the processes of Broudy, Feldman, and Yenawine, Perkins moves from concrete information to interpretation. Hamblen (1984) aligned art criticism questioning strategies with Bloom’s Taxonomy suggesting that a hierarchical structure leads to higher-level and more abstract forms of thinking. Some would question how well such structured conversations emulate the real conversations of critics (see the next entry on critical inquiry). Yet, interactive, inductive, empathetic dialogues about art appear to have value in developing visual awareness, buying time while the process of looking and thinking develops, and increasing the odds that connections made with the work will be grounded in the work as well as the student’s lived experiences.

This study defines understanding as both an activity and an attainment that includes idiosyncratic acts that transform both the person coming to understand and the subject under study. Findings suggest that the DBAE approach does not encourage the kind of critical inquiry needed for students to achieve understanding. Suggests a democratic classroom that embraces the knowledge, experience, and beliefs of the individual coming to understand so as to transform the viewer as well as the art under study.
OUTCOME IV: FACILITATING CRITICAL AND AESTHETIC INQUIRY

REFERENCES


Broudy asserts that imagination (the sensing and constructing of image) produces an allusionary base (the conglomerate of concepts, images, and memories available to provide meaning for the reader or listener) that is directly related to language acquisition. He describes “aesthetic scanning” as a technique for becoming sensitive to the properties of aesthetic objects in order to ascertain their meaning.


Feldman sets forth his steps for criticism in Chapter 12, “Mastering the Techniques of Art Criticism.”


Visual chart parallels Feldman’s four steps with Bloom’s six to identify correspondences.


Chapters 12 and 14 discuss a variety of approaches to art criticism and aesthetics including the use of structured discussions.

Perkins, D. N. The intelligent eye: Learning to think by looking at art. Santa Monica, CA: The Getty Center for Education in the Arts. Discussion elaborates on theory and process supporting the position that art is an occasion of intelligence, that is, art is an interesting subject to foster qualitative thinking.

RESEARCH


A review of the research findings including studies not mentioned in this entry. See this publication for more in-depth reporting on a number of studies, including the following:


RESEARCH AND REPORTS FROM PRACTICE


This participant-observer study of classroom art talk involved analysis of data collected from observations and other forms of documentation. Findings suggest that classroom art talk is primarily teacher talk. Exposure to discourse about art can be expanded in a variety of ways including whole-class lectures, one-on-one talk between student and teacher or student with peer(s), and use of films with artists discussing their work, readings, and writing.


An analysis of practice in five sites suggesting that the nature and outcomes of art viewing sessions varies widely due to differing purposes and goals of the teacher. The role played by artwork(s) also varied from superficial inclusion to centering classroom dialogue. Study suggests the need for teachers to be more aware of implicit and explicit reasons for engaging students with artworks.


Report features a university gallery as the setting for a service learning component of a college methods class in which groups of youngsters spent the better part of a day in the gallery. Author proposes that a dialogical community, in which viewer-to-viewer conversations are an integral process of the interaction with the art, enhances the learning experience.


Study involved a quasi-experiment with 190 sixth-grade students in an urban school district with a large proportion of Spanish-speaking students to determine effectiveness of transformational imagery and graphic organizers in mastering terms used in the formal analysis of art. Findings suggest both strategies may accelerate progress in the content area of art.


This quasi-experimental research study including quantitative and qualitative data suggests that a given model may have been effective in enhancing or stabilizing self-concept of students with emotional disabilities.


An analysis of responses by 48 adolescents to reproductions of four specific paintings. Findings suggest that multifaceted responses are generated by images that feature mirrors. Further, adolescents associate mirroring and reflection with issues of identity and thus can use examination of such artworks to explore significant dimensions of their existence including their own self-perceptions and how they are seen by others.


Development of reasoned perception involves comparisons and judgments within and between qualitative relationships. This study portrays a cycle of visual inquiry as beginning with nonlinguistic sense impressions, which become associated with feelings that translate into mental concepts from which meaning is derived. A view of visual inquiry that engages phases of perception, conception, expression, and reflection is proposed. Data gathered using educational
criticism applied to one lesson by each of three different teachers suggests more long-term studies are needed with a sustained curriculum of visual inquiry to evaluate development of reasoned perception.

Siskar, J. F. (2000). Promoting understanding in the art classroom: Connecting theories of understanding to art education practices. Unpublished doctoral dissertation, State University of New York at Buffalo. This study defines understanding as both an activity and an attainment that includes idiosyncratic acts that transform both the person coming to understand and the subject under study. Findings suggest that the DBAE approach does not encourage the kind of critical inquiry needed for students to achieve understanding. Suggests a democratic classroom that embraces the knowledge, experience, and beliefs of the individual coming to understand so as to transform the viewer as well as the art under study.

MODELS FOR PRACTICE


Armstrong, C. L., & Armstrong, N.A. (1977). Art teacher questioning strategy. Studies in Art Education, 18 (3), 53-64. This article presents a model for increasing students’ ability to organize their perceptions into categories and to use the newly formed categories to form generalizations that help in solving visual problems.


Prater, M. (2002). Art criticism: Modifying the formalist approach. Art Education, 55 (5), 12-17. Article suggests ways to fine-tune the Feldman/Mittler model by considering literal and functional qualities as well as formal ones and identifying expressive qualities, relating them to a relevant theory of art. In addition, Prater suggests that shifting the final phase from evaluation to understanding artworks in terms of aesthetic theories yields important insights.


Taunton, M. (1983). Questioning strategies to encourage young children to talk about art. Art Education, 36 , (4), 40-43. This paper provides (1) a rationale for using questioning strategies with young children; (2) questioning strategies, accompanied by sample questions; and (3) three sample dialogues between student and teacher.

Empowering Storytelling and Puzzle Problems

Theory

Stories provide a natural way to learn. Stories about artists, art objects, and events can create a context for thinking about aesthetic experience and for exploring aesthetic questions. Stories that present a puzzle problem make good material for discussion and debate.

While some would hold that aesthetic experiences can be “pure,” or unaffected by what one knows or learns, most teachers recognize that students come to class already having collected or formed certain presuppositions and information about art and artists. These affect their encounters with works of art. For example, there are any number of myths and stereotypes in circulation about artists. Many of these characterize artists in negative ways or focus on traumatic events. Peddled casually, these stories may or may not have any bearing on the truth and often distract learners from obtaining more significant information. Worse yet, such stories can diminish the qualities of artwork and misrepresent the character of the artist. On the other hand, reliable information about an artist’s life can help create a context for understanding and appreciating artwork.

Better Practice

Teachers who use stories about artists and puzzles about art can create a context for thinking about aesthetic questions.

Practice

Silvers (1995) makes the case that words mediate how art is seen. The content of what is said and how the story is told both matter. In observing and testing ideas with teachers, Silvers made some discoveries. If a story, even a false one, is powerful enough and told in a convincing manner, it can radically change attitudes about works of art. Clearly, what students know or learn about an artist can change what students see when they look at the work. For example, work of an artist regarded positively can fall into negative light with a compelling story. On the other hand, if the story is less than powerful or cannot compete with the perceived regard for the work, the “news” may be factored into opinions but will not essentially alter how the work is interpreted.

Thus it would appear that the ways in which story creates a context for artwork deserve attention. Silvers goes even further to suggest that a repertoire of storytelling techniques may

Employing Storytelling and Puzzle Problems

Theory

Stories provide a natural way to learn. Stories about artists, art objects, and events can create a context for thinking about aesthetic experience and for exploring aesthetic questions. Stories that present a puzzle problem make good material for discussion and debate.

While some would hold that aesthetic experiences can be “pure,” or unaffected by what one knows or learns, most teachers recognize that students come to class already having collected or formed certain presuppositions and information about art and artists. These affect their encounters with works of art. For example, there are any number of myths and stereotypes in circulation about artists. Many of these characterize artists in negative ways or focus on traumatic events. Peddled casually, these stories may or may not have any bearing on the truth and often distract learners from obtaining more significant information. Worse yet, such stories can diminish the qualities of artwork and misrepresent the character of the artist. On the other hand, reliable information about an artist’s life can help create a context for understanding and appreciating artwork.

Better Practice

Teachers who use stories about artists and puzzles about art can create a context for thinking about aesthetic questions.

Practice

Silvers (1995) makes the case that words mediate how art is seen. The content of what is said and how the story is told both matter. In observing and testing ideas with teachers, Silvers made some discoveries. If a story, even a false one, is powerful enough and told in a convincing manner, it can radically change attitudes about works of art. Clearly, what students know or learn about an artist can change what students see when they look at the work. For example, work of an artist regarded positively can fall into negative light with a compelling story. On the other hand, if the story is less than powerful or cannot compete with the perceived regard for the work, the “news” may be factored into opinions but will not essentially alter how the work is interpreted.

Thus it would appear that the ways in which story creates a context for artwork deserve attention. Silvers goes even further to suggest that a repertoire of storytelling techniques may
create context and stimulate discussions of aesthetic questions. Such stories, whether based on real life or invented, can also be used to stimulate dialogue and debate on aesthetic issues.

Vivid cases or puzzle problems, drawn from real-life controversial situations or invented for the purpose of provoking discussion, give students practice with verbal reasoning and critical thinking skills (Battin, 1995). Contemporary art and the history of art feature numerous examples of complex situations that raise aesthetic and philosophic questions. Some situations are internationally known while others may develop within a community, offering a window of opportunity for discussing aesthetic issues. The puzzle case method helps students recognize their own conceptions about art and challenges them to rethink them in a new light.

**Recommended Strategies**

Develop a repertoire of stories about the lives of artists typically presented in the classroom. Base these stories on quality sources and present artists in a balanced light concentrating on challenges, personal effort and investment, and achievements. Check to see if stories commonly circulated by given artists have any foundation in fact. Further, see what historians and critics have to say about connections between the artists’ lives and the work they make. Check for sources that contain text written by the artist or videos of taped interviews.

Use contextual information about an artist’s life when examining an artist’s work. Create a sense of where an artist lived, the era or time, issues or events influencing society and the artist, relationships with other artists, available materials and processes, and the artistic challenges undertaken. De-emphasize myths; instead, personalize artists by providing some insight into their lives and work.

Draw upon vivid case studies or stories (real and invented) about art objects and events that bring aesthetic questions to the table. Prepare students to work with puzzles that have no right answer; help them use the puzzles to practice skills in reasoning, debating, and forming positions.

**REFERENCES**


**REPORTS FROM PRACTICE**

Silvers, A. (1995). Vincent’s story: The importance of contextualization for art education. In R. Moore (Ed.), *Aesthetics for young people* (pp. 47-62). Reston, VA: National Art Education Association.  Makes the case that how students learn can change what they see. Recommends teachers develop storytelling skills and a repertoire of stories about art so as to create a context for understanding works of art. Notes that stories of artistic heroes are common to the great art traditions and a source of material to support commitments to multiculturalism and diversity.

**MODELS FOR PRACTICE**


Battin, M. P., Fisher, J., Moore, R., & Silvers, A. (1989). *Puzzles about art: An aesthetics casebook*. New York: St. Martin’s Press.  A collection of hard cases without right answers intended to stir up trouble. Just as there is no single right answer to a case, there is no single way in which these cases must be used in the classroom. Taken from real-life situations involving art as well as some fictional cases designed to explore certain dilemmas, these puzzle cases were contributed by 38 scholars working in aesthetics or related fields. Each chapter features an introductory essay outlining background issues in aesthetics and a group of diverse cases probing these issues. The puzzle cases can both provoke classroom discussion and serve as bases for papers, exercises, and examinations.


Stewart, M.G. (1997). *Thinking through aesthetics*. Worcester, MA: Davis Press.  Chapter 5 offers an array of activities for philosophical inquiry including great debates, role-playing, questions in the air, object ranking, token response, stories, and other writing. All are presented with practical suggestions for implementation.
Using Interpretive Strategies to Find Meaning

**Thematic Unity**

Finding thematic unity in a work of art organizes and controls interpretation (Walker, 1996). Constructing meaning for artworks around central unifying concepts or themes forms a crucial aspect of the interpretive process. Finding thematic unity can integrate discoveries and allows for personal or communal meanings. An organized pattern of meaning construction relies on key words throughout the interpretation. Introducing thematic ideas first also makes a more successful approach than beginning with description. Conversely, interpretations that lack thematic unity tend to be less coherent and fragmented.

**Description**

Description is a very significant component of professional criticism, closely tied to interpretation and evaluation. In the process, critics decide what to describe, how to characterize it, and what to ignore (Barrett, 1997). Students appear to use description as a mechanism in searching for a central idea (Walker, 1996, p. 89).

**Opposition**

Oppositional thinking is a powerful tool for creating meaning (Walker, 1996, p. 82). Contrasting opposites help define each other. Juxtapositions or binary relationships are a way of creating meaning. There can be internal oppositions that exist within an artwork as well as external oppositions that link artworks to contexts outside the work.

**Intertextuality**

References to intertexts or interdisciplinary connections outside the artwork add substance to an interpretation. Connecting links may be made with literature or music, social, cultural or political issues, and other interdisciplinary sources and themes. Interpretations without such links tend to be thinner and less effective (Walker, 1996, p. 89).
**Conceptual Knowledge**


**Metaphor**

Metaphor is a way of seeing one thing in terms of another (Feinstein, 1984, 1998; Lakoff & Johnson, 1980; James, 2000). Metaphors help to make sense out of experience in that they are constructs that have coherent structure, highlighting some things and hiding others.

**Viewer as Co-producer of Meaning**

Each aesthetic encounter involves three emphases: a participant or viewer, an object or event, and an occasion that takes place within a certain context of time, location, social condition, and so forth (White, 1998, pp. 324-325). Initial responses, for example, may reveal the lens through which a viewer sees an artwork. Likewise, awareness of how it is experienced as well as attention to the object or event are important sources for possible interpretations. The notion that the viewer, object, and context are all involved in creating meaning is consistent with post-structuralist theory in that the meanings found in an artwork are never finished and always open to reinterpretation with the viewer as co-producer of meaning.

**Principles of Interpretation**

Based on studies of contemporary art and criticism, Barrett (1994) has identified the following principles for interpretation (pp. 71-78):

- Artworks have “aboutness” and demand interpretation.
- Interpretations are persuasive arguments.
- Some interpretations are better than others.
- Good interpretations of art tell more about the artwork than they tell about the critic.
- Feelings are guides to interpretations.
- There can be different, competing, and contradictory interpretations of the same artwork.
- Interpretations are often based on a worldview.
- Interpretations are not so much absolutely right, but more or less reasonable, convincing, enlightening, and informative.
- Interpretations can be judged by coherence, correspondence, and inclusiveness.
- An artwork is not necessarily about what the artist wanted it to be about.
- Interpretations ought to present the work in its best rather than its weakest light.
- All art is in part about the world in which it emerged.
- All art is in part about other art.
- No single interpretation exhausts the meaning of an artwork.
- The meanings of an artwork may differ from its significance to the viewer.
- Interpretation is ultimately a communal endeavor, and the community is ultimately self-corrective.
- Good interpretations invite us to see for ourselves and to continue on our own.

**Practice**

**Metaphorical Thinking**

Entering a work, stepping into it, identifying with various aspects of it, fosters the use of analogy and metaphor. Strategies include writing from inside a portrait, becoming an object, making links to self and peers, working together to make sense of metaphor, and writing as a way of thinking about art (James, 2000). Selecting works as metaphors for one’s life helps a viewer find personal connections. Associations may be made in a formal context, through ties to nature, via cultural connections, around family bonds, or through religious referents (Jeffers, 1996).

**Metaphorical Mapping**

Metaphorical meaning in artworks is evocative and connotative, going beyond the literal or denotative meaning of artworks. In order to respond metaphorically, students need strategies that de-emphasize literal-analytical thought. Clustering spontaneous responses is a three-step process. Presented under relaxed attention conditions that reduce ten-
sion and promote concentration, students are invited to call out words or phrases elicited by the artwork, which are then recorded on a visible surface. A large circle is drawn around the first word or phrase. Subsequent words are “clustered” around the first meaning; that is, they are encompassed with smaller circles and connected to the large circle with radiating spokes. Second, the group eliminates redundant words and phrases and regroups what remains into a few descriptive words. Third, the artwork is re-examined to determine how adequately the clustered responses refer to the work. Students point out actual places on the artwork that fit or do not fit the condensed cluster configuration, dropping those that do not fit (Feinstein, 1998).

Aesthetigrams

Aesthetigrams are a way of mapping the sequence of “moments” that occur in an aesthetic experience (White, 1998). This method differs from metaphorical mapping in that the experience with the work is mapped instead of verbal responses. For example (see p. 327), a map might begin with one or more reactions, perhaps noting the feelings evoked, a spontaneous judgment, and an observation. Notes briefly describing what one experienced are recorded, and the map is further developed as ideas occur. In an illustrated example, the map grows as emotions, issues of taste, awareness of subject emphasis, context, and other questions, observations, or connections occur to the observer. Followed by reflective writing, the aesthetigram can construct meaning by considering the process of aesthetic response.

Emotive Writing

Emotive writing, as in poetry and letter writing, invites sensory, emotional responses and thus provides a way of developing a personal response to a work. Sustained or frequent exposure to a work such as looking at it daily, perhaps before going to sleep and upon waking, allows the viewer to muse on the work prior to responding. Strategies such as drawing or tracing the image prior to responding help engage the viewer and promote emotive responses even with short-term exposure. Letter writing invites the writer to address the recipient and involves a less formal and more personal style of description and storytelling. Possible motivations for a letter include real and imaginary recipients. For example, viewers can write letters to someone depicted in the image, someone who might find the image interesting, the artist, a previous owner of the work, or the next person destined to receive the work. The purpose of such letter writing is to produce responses that are deeply felt, more personal, and potentially metaphoric. Poetry, in its many forms, also invites a more metaphoric response because it requires attention to how language sounds and looks, and to the ways meaning is built economically with fewer and more special words.

Thinking Strategies

Thinking strategies involve description, looking for oppositions, and identifying relationships within the work and between the work and outside references. Using thematic unity as a strategy for organizing these findings can make interpretation more coherent and convincing. Description to search for key ideas may yield a central or unifying theme that can then introduce or frame an interpretation. Paying attention to oppositions and thematic links that can be made beyond the work may serve to enrich and strengthen interpretations. The principles of interpretation may also provide a guide for thinking about how meaning can be created.

Constructing an Interpretation from Contextual Knowledge

Walker (1996) offers a pedagogical model that involves three steps: showing challenging work, reading to develop a knowledge base (including background information on the work, critical writing, and/or interviews with the artist), and interpretive writing.
REFERENCES


MODELS FOR PRACTICE


Jeffers, C. (1996). Experiencing art through metaphor. *Art Education, 49* (3), 6-11. Article describes an approach implemented with preservice and in-service elementary teachers in which all chose a work as a metaphor for their life, identifying attributes and visual or symbolic references that had personal meaning. Using metaphors was reported to generate vivid associations and to develop insightful, deep, and personal understanding.

Perkins, D. N. (1983). *Invisible art*. *Art Education 36* (2), 39-41. Suggests that art can be made more “visible” to learners by directing attention to what is most engaging and illuminating in art. Examples include aesthetic effects, personality, motion, surprise, global as well as local effects, suggested as well as real effects, plus symptoms, tricks, and reinforcers used by the artists.


Rico, who originated the clustering strategy, describes its application to learning how to write.


This case study examines four thinking strategies used by university undergraduate and graduate students in the interpretation of works by a contemporary artist. The participants in the study ranged from novices to those with some expertise in criticism. Article includes a review of relevant theory in cognition, provides a contemporary perspective on interpretation, and describes practices used by professional critics. The research model is reported along with findings that suggest thematic unity plays a crucial role as a conceptual organizer of information produced by other thinking strategies.
OUTCOME IV: FACILITATING CRITICAL AND AESTHETIC INQUIRY

Promoting Critical Thinking Through Problem-based Inquiry

THEORY
Aesthetics as critical inquiry is instruction in which students actively participate in the process of asking questions and developing answers using the strategies of professional aestheticians (Anderson, 1998). Through the development of critical skills, strategies, and thinking structures intrinsic to the discipline of philosophical aesthetics, students can ask questions and seek answers about meaning and value in art, how we talk about art, aesthetic experience, and beauty. Reports from Anderson and others (Hickman, 2000; Siskar, 2002) suggest that a range of work and, specifically, problematic contemporary work can launch classroom debate, reflection, and synthesis that leads to fuller understanding of the concept of art.

BETTER PRACTICE
Teachers who use a problem-based approach to learning about art can promote reflection and inquiry, research and debate, leading to deep thinking about complex situations.

Geahigan (1998) distinguishes critical inquiry from talk about art focused on description, analysis, interpretation, and evaluation. In contrast, critical inquiry focuses on searching and finding, is a recursive process, is not a procedure, and involves specialized knowledge and efforts to secure background information (p. 12). A similar instructional approach is used in problem-based inquiry. While these approaches require extensive preparation on the part of the teacher as well as skills with questioning strategies and cognitive coaching, some argue that their benefits far exceed the limits of structured discourse in producing deep thinking about complex situations (Costantino, 2002; Geahigan, 1996, 1999).
PRACTICE

Costantino (2002) endorses problem-based learning (PBL) as a concrete approach to teaching aesthetics. Here fictional problems, or real ones, re-create the challenges found in real-life situations. For example, problems commonly encountered by curators or civic boards with responsibilities for making community decisions can provide useful models. While the teacher develops the problem, it becomes the task of the students to solve it. As such, problem-based learning combines self-directed inquiry with cooperative learning. PBL can be used to organize a whole unit of instruction, as an introduction to a unit, or as a conclusion. She identifies several steps in the problem-solving process:

- Students must work together to pinpoint the central problem or core problems.
- Brainstorming determines ways to go about solving the problem; this often involves generating lists of questions or analyzing what one knows, wonders about, and/or has learned (KWL) or what one knows and what one needs to know (KNK).
- A plan for investigation is made by prioritizing questions according to their relevance to the problem as well as to the interests of various students in a working group.
- Sources for information are located, and often this requires that students draw information from a number of disciplines.
- Within each working group, individual students carry responsibility for investigating a particular question or area of research.
- Groups reconvene to discuss their findings and to refine their research strategy.

As results are developed and presented, the teacher acts as a cognitive coach causing students to reflect on the questions they chose to ask, and not ask, the reasoning behind their thinking, the methods of their investigation, contradictions discovered, and questions or concerns that surfaced.

Erickson (1988) identified attitudes, skills, and knowledge necessary for orchestrating aesthetic dialogues, and it appears that the same list serves teachers preparing to engage in “cognitive coaching.” Rather than acting as an authority, helpful attitudes include pretending not to know, being patient and polite, and thinking along with students. Productive strategies include acting as a devil’s advocate and provoking situations that raise aesthetic issues. In conducting such discussions, maintaining order while resisting agreement, lecturing, and/or manipulation can help students arrive at their own observations, discoveries, and points of view. Models for such coaching are also identified by Barrett (2000). He provides a model for getting children to think beyond the obvious that involves coaching, coaxing, questioning strategies, and the ability to correct or challenge responses in order to extend learning.

Geahigan (1999) also endorses a problem-based approach in which art criticism functions as a form of disciplined inquiry. He identifies the goal of such an approach as assisting students in their own search for meaning and value. Working in collaboration with each other, students can determine the meaning and value of works of art for themselves. In the process of inquiry, students are motivated to acquire biographical and contextual knowledge. Sometimes this is provided by the teacher although students can do their own research. Students may need help in developing aesthetic concepts that make it possible to enlarge and refine their perceptual responses. Definitions, provided through examples and demonstrations conducted by the teacher, can give students practice with both relevant skills and concepts. He sees such an approach calling upon a mix of instructional strategies. In a process similar to the one described by Costantino (2002), Geahigan (1996) recommends the following:

Create problem situations that lead students to more careful observation of and reflection about works of art and that foster the exchange of different points of view.
Invent instructional activities that require students to formulate and defend individual hypotheses about the meaning and value of works and to defend these to others—activities that foster appropriate attitudes and habits for responding to works of art.

Identify different kinds of background knowledge students need to recognize problems and to formulate more adequate responses. Provide instruction in concepts and principles for greater sophistication in responses. Shipps (1996) reports the value of providing an introductory set of concepts and principles prior to examining artwork. Shipps notes that postadolescents, and most likely adolescents, need new ways to talk about art as concrete operational learners. He suggests discussing a poststructural pragmatist aesthetic emphasizing three points:

- Human beings are constantly “making up” our world as we understand it.
- Humans experience everything as “sign.”
- Dealing with signs and structures allows us to ascribe meanings to things.

A “sign” has meaning by virtue of its relationship to everything else that can be noticed or learned, and the process of making meaning of art should be consistent with the ways human beings have always made sense out of the world of experience—that is, by structuring perceived elements into conceived relationships. Rather than decoding a work of art to find the meaning in it, Shipps suggests, the task is to help students make meaning of art through experiencing it as thoroughly as possible, noticing what can be noticed, and relating these discoveries in ways that make sense.

**REFERENCES**


An exploration of the role of art and aesthetics through examination of several cultures. Provides source material on Eskimo, Aboriginal Australian, Sepik (New Guinea), Navajo, Yoruba, Aztec, Early India, Japanese, and Western aesthetics. Includes discussion of comparative aesthetics, art as culturally significant meaning, and the encoding of meaning through style, feeling, and skill.


Proposes a model for criticism that has the following steps: reaction, perceptual analysis (representation, formal analysis, formal characterization), personal interpretation, contextual examination, and synthesis (resolution, evaluation).


This guide includes discussions of art criticism, the role of description, the principles of interpretation, judging art, theory and art criticism, and writing and talking about art. The discussions feature examples from contemporary art.


Discusses the confusion between criticism as inquiry and criticism as discourse. Argues against formulating a procedure for discussion in favor of creating conditions that will promote reflection and inquiry.


Provides a theoretical argument against lock-step approaches to criticism. Promotes strategies that cause students to share responses and to justify them through reasoned discourse. Includes a proposal for teaching students to talk about their own aesthetic experiences and artistic preferences, acknowledging that most students start with statements such as “I know what I like” and/or “It may be great art, but I still don’t like it.”


A critical examination of the emergence of art criticism in American art education, the problems of spoken and written critical discourse, educational models of criticism taken as representative of critical discourse, and recitation taken as art criticism. The conclusion of the article presents an alternative form of disciplined inquiry said to promote personal response to art informed by research and development of skills and concepts.

**RESEARCH**


Reports on a study with 94 students in two English secondary schools to determine what theoretical levels could be identified in written and pictorial responses to actual works of art. Findings included the observation that more consid-
ferred and informed responses could be developed by students when certain conditions are met. These include acknowledging, valuing, and building upon students’ initial engagement with art objects; developing a language for critical discussion; and instruction for researching meaning.


A study with postsecondary non-art majors in an introductory-level art appreciation course. The study found more lasting impact when teachers introduced aesthetic theory, a way of understanding what is meant by art, before discussing specific examples of artwork.


Reports on a researcher-created, philosophical and inquiry-based model for an aesthetics unit implemented with an eighth-grade class. Includes a historical account of aesthetics in art education and a review and description of prominent aesthetic theories and art critical methods used in the classroom.

**REPORTS FROM PRACTICE**


Introduction to problem-based learning illustrated with two examples. The first features a fictional problem involving the anonymous donations of an artifact of possible Egyptian origin in which elementary students in a museum setting were given the charge to determine the objects’ authenticity. The second, designed for middle or high school-level students, involved the organization of an exhibit of Artemisia Gentileschi’s paintings using different sources of information.


Article explores what it means to teach aesthetics and the feasibility of doing so. Outlines specific learning content for a K-12 aesthetics curriculum. Identifies six philosophical skills: making distinctions, drawing conclusions, defining concepts, studying traditional philosophies, distinguishing types of claims, and building arguments. Erickson acknowledges that teachers must gain all the attitudes, skills, and knowledge they would teach their students and concludes her article with a call for research and development, basic training, and supplies needed to achieve the goal of teaching aesthetics K-12.

**MODELS FOR PRACTICE**


Provides a model sequence for critical inquiry activities resulting in students’ theories augmented by those of professional aestheticians. Beginning with a problematic work (Sherry Levine’s appropriated image from Ansel Adams), students engaged in analysis and synthesis, developed a cooperatively developed criterion-referenced position, argued for different positions, reframed arguments in the face of new evidence, and tested their positions against previously established aesthetic theory.


Article provides a comparison of inquiry with stages of critical inquiry and concludes with a model sequence implemented by a seventh-grade teacher. Students began by noting initial responses to a selection of 20th-century abstract painting that led to research, writing assignments using guiding questions, concept and skill instruction, and oral presentations on individual works. A pre-post comparison of reactions suggests that the inquiry process produced insights attributed to opportunities for thoughtful viewing, dialogue, sustained reflection, gains in background knowledge, and development of relevant concepts and skills.


This NAEA Advisory identifies three points from poststructuralism that help students talk about art. Restated briefly they are: a) humans are constantly “making up” our world as we understand it; b) humans experience everything as “sign” or “signifier”; c) dealing with signs and structures is what allows us to ascribe meanings to things.


Reports a study using Anderson’s model with postsecondary non-art majors in which verbal and written critiques were analyzed. The author found the approach consistent with constructivist teaching and that its practices produced meaningful engagement.


The fifth in a series edited by Ralph A. Smith and sponsored by the Getty Center of Education in the Arts. The critic Theodore F. Wolff and art educator George Geahigan are paired in an exploration of art criticism. Wolff contends that art criticism offers an opportunity to understand the creative process. Geahigan offers methods for implementing art criticism in the curriculum.
Facilitating Student-Curated Exhibitions

**Better Practice**

Teachers who engage students in curating their own exhibitions help their students develop a wide range of critical skills in the process of exploring personal preferences and creating a presentation with text and images.

**Theory**

Curatorial tasks require a wide range of higher thinking skills. There are preferences to explore, choices and decisions to be made, contexts to construct, and connections to identify and articulate. Part-to-whole relationships must be considered as diverse pieces are put together thematically, sequentially, or theoretically. Research and documentation can be required. Presentational skills as well come into play: design issues of layout and text, signage, visual graphics, and overall organization. Tasks may extend to writing text for the display and/or for distribution and speaking as in giving a tour, explaining choices, and illuminating context and meaningful connections. In short, the real tasks of curators involve a process and the creation of a product that are loaded with opportunities for exploring personal preferences, making decisions, and thinking critically.
The actual form of the exhibition can range from mini-table-top presentations and mini-museums to full-scale installations in schools and community settings (Baker, n.d.; Luehrman & Unrath, 2000; Zuk & Dalton, 2001). Reproductions gathered from the Internet, magazines, postcards, museums, and classroom visual resources can be used. Displays can be simple and small scale, small-scale models imagined for larger spaces, bulletin board displays, hallway installations, or virtual exhibitions using technology.

Museum settings offer yet another opportunity to create a curated tour where selected works are identified and studied in depth. Finding samenesses among differences is a form of higher-level thinking activated when students are asked to find connections among diverse works of art. Creating tours, including ways to engage viewers, is another level of exercise in critical thinking and creative problem solving (Sandell & Cherry, 1994; Stephen, 2001).

Collaborations that incorporate viewer response provide another format for exhibitions (Reese, 2003). Shows can be designed to include not only the works of art made by artists but also those works made in response by youth and facilitators. Text can include basic information plus interpretive narratives by art historians, the museum director, the curator, the artists, and/or the youth participants. Areas can be set up for viewers to contribute visual and verbal responses.

Recommended Strategies

- Find opportunities for students to curate an exhibition, selecting a level of challenge and format appropriate for their developmental readiness.
- Encourage group work in which choices are made, preferences are discussed, and connections found among diverse works.
- Allow students to gravitate to different roles in the process of creating an exhibition; allow them to use their strengths and to work as a team.
- Provide practice articulating reasons for preferences; have students talk, share ideas, then write and rewrite.
- Involve students in research and the construction of a context for thinking about work.
- Use themes and human concerns across cultures and times as a way of making connections among diverse works.
- Challenge students to make connections between theories about art and selected works.
- Encourage students to raise questions generated by the process of creating an exhibition and/or the findings from research and discussion.
- Involve students in making presentations to others such as younger children and parents.
- Look for opportunities to involve students in collaborative exhibitions in the community or create one in the context of the school.

Finding samenesses among differences is a form of higher-level thinking activated when students are asked to find connections among diverse works of art.
OUTCOME IV: FACILITATING CRITICAL AND AESTHETIC INQUIRY

REFERENCES


Burmark, L. (2002). Visual literacy: Learn to see, see to learn. Alexandria, VA: Association for Supervision and Curriculum Development. Book focuses on the importance of visual literacy with sections that contain ideas for effective communication and for making presentations with both words and images.


Zuk, B., & Dalton, R. (Eds.). (2001). Source book focuses on aesthetics. Chapter 2 explores aesthetic theories and preferences were analyzed. Findings reveal that a conception of contexts, with aesthetic perception as well as the influences of race and ethnicity on their orions regarding their processes for constructing meaning in art and developing

REPORTS FROM PRACTICE

Burton, D. (2001). Social dynamics in exhibiting art: Rethinking the practices of art education. Art Education 54 (1), 41-45. Notes that while most art teachers regularly exhibit student work, students are rarely involved with the process and thus stand to learn little from it. Identifies four basic phases in the exhibition process: conceptual, development, functional, and assessment. Explores the social dynamics of the process resulting from collaboration, negotiation, compromise, group problem solving, and interaction with a public audience.

Burton, D., & McGraw, T. (2001). In B. Zuk & R. Dalton (Eds.), Student art exhibitions: New ideas and approaches (pp. 28-32). Reston, VA: National Art Education Association. Reports on exhibition practices of McGraw and her students in which they take charge of the exhibition. Suggests that student autonomy must be supported by clear procedures and well-understood reasons for each step of the process. Recognizes that exhibiting art is both a complex affair and a social activity. While they require plenty of commitment, cooperation, collaboration, and communication, student art exhibitions can be among the most motivating and rewarding experiences students have in art.

Reese, E. B. (2003). Art takes me there: Engaging the narratives of community members through interpretive exhibition processes and programming. Art Education, 56 (1), 33-39. Article recounts the development of a special exhibition that involved community participation and the development of intertextual narratives. A model for “a pedagogy of performance” is provided in which examining what one sees, what autobiographical experiences one brings to the work, the culture of the museum, the nature of the institution, and interdisciplinary connections all factor into an intertextual response.

Stephen, V. (2001). In B. Zuk & R. Dalton (Eds.), Student art exhibitions: New ideas and approaches (pp. 33-39). Reston, VA: National Art Education Association. Reports on three models for exhibitions that involved students, in various degrees, in the process of developing an exhibition in an art museum. One, a province-wide show, included a student as one of seven members of the jury and curatorial committee. A second involved a number of student inter-age and interranchal representatives and less adult intervention so that decision-making processes were student centered. A third exhibition involved a team of upper-elementary students who selected works from the museum collection to organize a show.

MODELS FOR PRACTICE

Baker, D. W. (n.d.). Strategies for responding to works of art. Handout prepared for art teachers. University of Wisconsin-Milwaukee Department of Art. Includes Counter Top Galleries as a strategy for students. Using postcards, students create mini-gallery displays that can sit on shelving. Learners are encouraged to use a theme, subject, style, or artist to establish a reasonable coherency in the selection and presentation of works in their mini-gallery.

Bass, K., Eisner, E., Hanson, L., Cotner, T., & Yacoe, T. (1997). The educationally interpretive exhibition: Rethinking the display of student art. Reston, VA: National Art Education Association. Although the book focuses primarily on the display of student art, it provides a model for an exhibition in which general and specific commentary as well as certain devices for display inform the viewer.
LACMA Lab, Los Angeles County Museum of Art. (2002, June–2003, January). The beat road: Student installation project. Installation created by seventh-grade students from Fairfax High School in collaboration with artist Michael Asher. Working with a theme, students selected works from the museum’s collection and then designed and installed the exhibition complete with signage and text.

Luehrman, M., & Unrath, K. (2000). Making mini-museums to translate inquiry into practice. Presentation prepared for the NAEA Convention. Although developed with preservice teachers in mind, this presentation offered a model for creating a mini-museum in the form of a display or multimedia presentation. The works of a single artist or the artifacts of a culture make up the subject of this investigation, which results in a visual display supported by written material. Students are evaluated on the presentation of images, contextual information, identification and discussion of style and meaning, and guiding questions, presentation quality, and museum guide. Model could be adapted for use with secondary students.

Sandell, R., & Cherry, S. (1994). Talking about art: From past to present, here to there: Preservice art teachers collaborate with a museum. *Art Education, 47*(4), 18-24. Article describes family tours designed by art education majors in a local museum. In this model, students select an object on which to become an expert, engage in historical and critical research, work with a team of peers to identify connections between a diverse set of objects, design a tour with activities for engagement, and test it with museum visitors.
Using Models for Writing About Art

**Better Practice**
Teachers who engage students in reading critical writing and, following such reading, invite students to model the writing will help their students develop skills in writing critically.

**Theory**
Models serve an important role in setting expectations, illustrating how a problem can be addressed, and demonstrating different ways of developing ideas. Several studies conducted by Wilson (1966, 1970, 1972) led him to conclude that critical writing best develops when critical writings are read and used as models for student writing. His findings are supported by a more recent study (Carpenter, 1996).

Different formats can also capture reflective writing. Postcards and letters, for example, unearth more personal observations because they suggest a close relationship with a recipient and permission to speak candidly and informally. Poetic models permit a different format for response and may invite more elegant language as well as metaphor and analogy. Writing meant to inform viewers or to synthesize ideas usually takes a more formal approach to format and language.
**REFERENCES**


Carpenter, B. S., II. (1996). A meta-critical analysis of ceramics criticism for art education: Toward an interpretive methodology. Unpublished doctoral dissertation, the Pennsylvania State University. DAI 9628062. Intervention used meta-criticism to analyze essays on works of art and a ceramic artist prior to writing essays. Study found the process resulted in critical modes of thought stimulated by continual acts of critical inquiry with works of art, ideas of fellow students, critical essays, and important issues found in current social and cultural contexts.

Wilson, B. G. (1966). An experimental study designed to alter fifth and sixth grade students' perceptions of paintings. *Studies in Art Education, 8*(1), 33-42. Short-term experimental study found that broadening students' perception of artworks requires careful attention to language and perceptual activities.


Wilson, B. (1972). The relationship between years of art training and the use of aesthetic judgmental criteria among high school students. *Studies in Art Education, 13*(2), 34-43. Although the study involved a content analysis of verbal responses to a work of art by high school students, 35 with zero years of art and 31 in their third year, more adequate criteria were used in judging works of art by those taking art.

**MODELS FOR PRACTICE**


**PRACTICE**

**Recommended Strategies**

- Invite students to write letters or postcards that reflect their current observations, questions, and insights (Block & Klein, 1996).
- Have students color-code the writings of critics for description, analysis, interpretation, judgment, and contextual and biographical information. Have them examine ways in which comparisons or connections to other works of art are made.
- Compare differences in critical writing using examples that are relevant to the work students are doing.

- Use guides for writing about art that provide useful pointers.
- Have students refer to models as they write their own essays.
- Encourage language arts teachers to use art as a prompt for writing, guided by good models.
- Invite creative responses to works of art with questions such as: “What might the drawing say?” or “What might the subject say if it could speak?”

**RESEARCH**

Making Art Inspired by the Study of Art

**Practice**

Teachers foster emotional engagement with a work of art through questions and simple observations that allow students to “enter” the scene, discover ever more detail, and spin their own stories. With the exposure to possibilities for expression and set on a mission to express their own ideas, students can then borrow or adapt conventions, compositional structures, techniques, and/or visual ideas as it suits their ends (Aukerman, 1991, 1992, 1993, 1994).

Studies from the masters, in which the task is to emulate as closely as possible the original work, provide tactile and visual ways for gaining insight into an artist’s sensitivities and techniques. Experimentation with media, scale, tools, and processes used by others can open up possibilities. Adapting techniques or approaches to one’s own expressive needs encourages translation and creative thinking. Making a work that is an homage to an artist invites personal response to conceptual and representational ideas.

**Recommended Strategies**

Engage students emotionally in the discussion and consideration of artworks. Ask them to speculate on what is going on, what feelings they sense, and whether or not they can identify with those feelings. Encourage them to think about the circumstances and how they might visually represent their own experiences. Invite them to think about how they might use in their own work something the artist has shown them to take (Aukerman, 1992, 1994).

Individual images from art may be used as prompts for a new image. Example: What happened next (Wilson, Hurwitz, & Wilson, 1987).

Use a verbal description of an event that inspired an artwork and invite students to do their own version, prior to looking at one or more images of the same made by artists. Compare the works to find commonalities and differences (Wilson, Hurwitz, & Wilson, 1987).

**Better Practice**

Teachers who cycle students back to creative personal expression after investigations with artworks promote exploration of ideas, concepts, and techniques inspired by the objects under study.

**Theory**

Artists have a long tradition of learning from those who came before them. In some ways, artists stand on the shoulders of those who preceded them. In emulating, experimenting with, appropriating, and adapting ideas, concepts, themes, subject matter, styles, techniques, and processes from the history of art, young artists expand their repertoire of ideas about the possibilities of art. More than creating art “in the style of,” making art that is inspired by the study of art can take many forms.
If experiencing the feel and technique of an artist is the intent, invite students to do studies from master artists. Encourage them to further research the context out of which the work came.

Following in-depth study of an artist’s work or a collection of artwork invites students to make a work that inspired by the encounter. The options might range from a study to quoting or appropriation, or to an adaptation, take-off, or extension of the original work (Sandell & Cherry, 1994).

Suggest the possibility of entering into a dialogue with another artist, creating a “collaborative” piece or one that responds to an existing one (Cherry & Mellendick, 2002).

Invite students to examine cultural icons and images from their own heritage, investigate these images, and consider alternative ways to transform traditional images to express personal ideas as a basis for making artwork (Erickson, 2000).

MODELS FOR PRACTICE


Aukerman, R. (1992, April). Children's art from fine art. School Arts, pp. 30-32. Article proposes a method for emotionally connecting children with works of art through questioning strategies. Reports on a method of instruction developed over the years in the Young People’s Studios at the Maryland Institute College of Art.

Aukerman, R. (1993, October). Learning from della Robbia. School Arts, pp. 18-19. Describes how upper-elementary children connected with sculptures by della Robbia and were inspired to make their own personal sculptures and bas-reliefs.

Aukerman, R. (1994). Move over Picasso! A young painter’s primer. New Windsor, MD: Pat Depeh Books. Ten works from the National Gallery are presented in context with background information on the artist, questions to help children take a careful look at and engage emotionally with the work, and suggestions for materials, planning, and developing a painting of one’s own. Illustrated with student work from upper-elementary children from Saturday classes at the Young People’s Studio at the Maryland Institute College of Art.

Cherry, S., & Mellendick, L. (2002, April). Artful collaborations. School Arts, special pullout section. Article describes a collaboration between a visiting artist and an art teacher that developed an art problem called “Out of the Box.” The artist describes his work and offers reflections. The teacher offers reflections as well as guiding questions, artistic behaviors and visual concepts, and interdisciplinary connections. Examples of student work from seventh and eighth graders are included.

Erickson, M. (2000). Crossing borders in search of self. Art Education, 53 (2), 46-52. Transforming images from one’s own cultural heritage may be empowering, yet it is also controversial. Erickson offers objectives for guiding students in borrowing traditional images from their own or others’ cultures.

Heintz, J. (1997, March). How does your garden grow? School Arts, pp. 12-13. Article describes how elementary children introduced to a number of artworks were inspired to invent their own solutions to the question.

Roukes, N. (1988). Design synectics: Stimulating creativity in design. Worcester, MA: Davis Press. A source book for ideas exploring the possibilities of disruptive thought or synectic thinking in which two divergent notions come together to create something new. Includes concise introductions to different approaches followed by studio sections illustrating visual problems and sample solutions. Includes chapters on the substructure of design; design and synectics; design and signification; paradox, humor, and prevagination; and change.

Sandell, R., & Cherry, S. (1994). Talking about art: From past to present, here to there. Preservice art teachers collaborate with a museum. Art Education, 47 (4), 18-24. Article describes a collaboration with a local museum in which art education majors select an object from the collection to be the focus of a semesterlong investigation of a chosen object including historical and critical research. The semester concludes with the open-ended problem of creating a work of art inspired by the object studied.
