



**Title:** Teaching for Understanding in the Arts: The Elementary Subjects Center at Michigan State University

**Author(s):** Wanda T. May

**Source:** May, W. T. (1990, Spring). Teaching for understanding in the arts: The elementary subjects center at Michigan State University. *The Quarterly*, 1(1-2), pp. 5-16. (Reprinted with permission in *Visions of Research in Music Education*, 16(1), Summer, 2010). Retrieved from <http://www-usr.rider.edu/~vrme/>

*It is with pleasure that we inaugurate the reprint of the entire seven volumes of The Quarterly Journal of Music Teaching and Learning. The journal began in 1990 as The Quarterly. In 1992, with volume 3, the name changed to The Quarterly Journal of Music Teaching and Learning and continued until 1997. The journal contained articles on issues that were timely when they appeared and are now important for their historical relevance. For many authors, it was their first major publication. Visions of Research in Music Education will publish facsimiles of each issue as it originally appeared. Each article will be a separate pdf file. Jason D. Vodicka has accepted my invitation to serve as guest editor for the reprint project and will compose a new editorial to introduce each volume. Chad Keilman is the production manager. I express deepest thanks to Richard Colwell for granting VRME permission to re-publish The Quarterly in online format. He has graciously prepared an introduction to the reprint series.*

# Teaching for Understanding in the Arts: The Elementary Subjects Center at Michigan State University

By Wanda T. May

*Institute for Research on Teaching  
Michigan State University*

**M**any interesting and promising endeavors are underway across the nation in university and research-and-design centers that are exploring arts education from a variety of perspectives: policy, curriculum development, teacher preparation and staff development, teaching practices and learning at all education levels, and the documentation and evaluation of learning. Although the Center for the Learning and Teaching of Elementary Subjects (Elementary Subjects Center) focuses primarily on identifying better ways elementary teachers can teach for students' conceptual understanding, problem-solving, creative/critical thinking, and higher order applications, these interests are tightly linked to teaching and learning in specific subject areas. The two arts areas now selected for intensive study in the Center at Michigan State are visual arts and music. The five-year program of research involves several

---

*“What content should be taught when teaching for conceptual understanding and higher level thinking? How do elementary teachers and specialists concentrate their efforts to use their limited resources best? And in what ways is good teaching subject-specific?”*

---

studies which complement the foci and endeavors of other arts-related centers across the nation.

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

The work of the Elementary Subjects Center is designed to unfold in three phases over a five-year period. Phase 1 began in 1987 with extensive literature reviews and interview studies designed to elicit and synthesize the points of view of various stakeholders (representatives of the underlying disciplines, intellectual leaders, and organizations concerned with

curriculum and instruction in school subjects, classroom teachers, and state- and district-level policymakers). Stakeholders' views were elicited concerning "ideal" curricula, instruction, and evaluation practices at the elementary level. Phase 2 involves interviews and systematic observation of practice, particularly best practice as observed in the classrooms of teachers believed to be outstanding. Phase 2 also involves in-depth analysis of commonly used curricula as well as distinctive curricula developed with special emphasis on conceptual understanding; it also includes policy studies. In Phase 3, test models of ideal practice will be developed based on what has been learned and synthesized from the first two phases.

### **Review of Research on "Thinking" in Art and Music Education**

Specific to the arts, the literature review of Phase 1, *Understanding and Critical Thinking in Elementary Art and Music* (May, 1989), describes the goals of elementary art and music education in historical and theoretical context and explores the parameters of art and music content. After tracing trends, espoused goals, and research interests over time, researchers found that both arts areas have debated about what counts as arts knowledge within their disciplinary areas and the relation of visual arts and music to the other arts. Their findings also reiterate the arts' perennial struggle for a more secure position in the elementary school curriculum. The review suggests that both arts areas have focused primarily on exploring and describing students' developmental stages, performance abilities, talent, and creativity; and students' responses to and perceptions of art and musical forms. Traditionally, there has been little application of these findings to school practice or to teaching for conceptual understanding.

Aesthetics, criticism, and historical or sociocultural dimensions are discussed in the report as cogent dimensions of arts learning. There is little evidence, however, that these areas have been emphasized in

teacher preparation programs or K-12 practice. The goals emphasized by most teachers in actual practice are production (making art) and performance (making music). Much of this narrow focus is due to the production/performance emphasis of teacher-preparation and staff-development programs for specialists, little subject-matter preparation for classroom teachers, and unchanging structural constraints in schools that impinge on sustained, in-depth teaching and learning. Most specialists are constrained by poor funding and support, little time allocated to the arts, arbitrary scheduling, weekly gaps between instruction, and high pupil-teacher ratios.

The remainder of the report explores the nature and relationship of critical and creative thinking in the arts, the broad content areas of the arts as subjects of study, and paradoxes presented in the literature related to age and stage theories. Reviews of recent research in cognition suggest that creative and critical thinking are very similar processes in that they are reflexive endeavors in higher order thinking and outcomes. Purposes and outcomes distinguish these kinds of thinking. Equitable attention to conceptual, dispositional, and procedural knowledge; students' prior knowledge and experiences; metacognition; and dynamic instructional discourse seem to promote understanding and higher order outcomes.

Further, hierarchical and simple-to-complex schemes like Bloom's taxonomy or those held by Piagetian purists are not supported by much of the research in cognition and novice-expert studies, particularly as cognition is related to learning-specific subjects. Rather, developing understanding is a reflexive endeavor most often embedded in subject-specific learning that is mediated in social context. One of the center's reports—an analysis and review of 12 programs designed to teach generic thinking skills—concluded that programs of this type can be effective if they have multiple goals, are coupled with teaching for thinking within subject areas, and include features that will increase the likelihood of transfer (Rosaen, 1988).

## State and District Policies

One of the policy studies of Phase 2 now is available: *State Guidelines for Reshaping Academic Curricula in Elementary Schools: A 50-State Survey* (Freeman, 1989). This study assesses state policymakers' efforts to promote teaching for understanding and thinking in elementary schools. Researchers studied to what extent and in what ways state policy initiatives encourage elementary school teachers to teach for conceptual understanding, problem-solving, and other aspects of higher order thinking. What initiatives are most likely to play a prominent role in the press to provide a more balanced curriculum? What assumptions characterize these efforts? Data were provided by two rounds of extensive phone interviews of curriculum specialists in state departments of education and a review of curriculum-related documents cited during the interviews.

Results indicate that state guidelines for curriculum reform are typically communicated through in-service programs, goals-and-objectives statements, and/or guidelines for local curriculum planners. Across the nation, reform initiatives rarely include statewide tests. Infrequently cited initiatives included gifted-and-talented programs, special publications for teachers, textbook-adoption policies, and incentive grants to local districts.

The report highlights similarities and differences in policy initiatives of seven states that claim to be actively promoting curriculum reforms: California, Hawaii, Indiana, New York, North Carolina, Missouri, and Utah. Of the 50 states, the 25 that reported placing equal or greater emphasis on critical thinking than on basic skills were more likely to use a variety of initiatives to encourage elementary teachers to teach for conceptual understanding; include in-services, tests, and textbook adoptions in their policy framework aimed at this goal; and assume that higher order thinking should be taught as part of every subject and not as a separate generic skill. The policy frameworks of the seven most active states were apt to include three central elements: goals-and-objectives statements for teachers, in-service programs, and statewide tests.

California's efforts were more comprehensive than those of any other state.

The results of this survey suggest that state policy frameworks often are grounded in the assumption that students must master basic skills before attempting problem-solving or other aspects of higher order thinking and application. Such assumptions are likely to promote inequities in opportunities for individual students to engage in problem-solving and other aspects of higher order thinking.

In addition, this assumption contradicts recent research in cognition. Several studies in reading and mathematics, for example, demonstrate that it is possible to successfully integrate instruction focusing on both conceptual understanding and basic skills. Two other policy reports soon will be available: one, a detailed study of California; another, an analysis of district-level policies and practices in a total of six districts in California, Florida, and Michigan.

## Teacher Surveys

Data are being analyzed from the teacher-survey study of Phase 2, with questionnaire responses from 678 teachers in 36 schools in Florida, California, and Michigan. The study will reveal information about teachers' allocations of instructional time to different subject areas, self-ratings of their knowledge and effectiveness in each subject, their goals in teaching each subject, the degree to which they attempt to integrate teaching the subject with other subjects, their relative use of different instructional formats and activities, their experience with and use of commercial curricula, and the policy sources and other influences that they respond to when planning their curriculum and teaching.

Analysis also will address the relationships between content practices and state and district policies, grade-level differences, school socioeconomic status differences, public and private school differences in these practices, allocation of resources across subject areas, barriers to teaching content for understanding, and differences in responses between specialist and classroom teachers in the arts.



Preliminary cross-tab analysis in visual arts, for example, suggests that teachers who report they are emphasizing goals related to problem-solving and higher order applications place lower priority on activities such as demonstrations and whole-class, individually produced art objects. These teachers are apt to emphasize more writing; presentation of information; and viewing, discussion, and critique.

### **Experts' Curriculum Critique and Improvement Exercises**

Data analysis collected from this study is almost complete. This study involved soliciting opinions from two sets of experts on "good" curricula and teaching in the arts. Selected because they are knowledgeable about the subject matter itself and about what is learned in teaching it in elementary classrooms, these nominated experts included classroom specialists and university professors. Participants were asked to identify key instructional goals and concepts in their subjects. Music experts also critiqued the most recent edition of Silver Burdett & Ginn's music series, a commonly used market-share series at the elementary level. Since there is now no comparable resource in visual arts, art experts did not critique an existing curriculum.

Each music expert was involved in a six-hour interview and asked to discuss how his or her goals would be articulated in practice. All experts were asked to write a few exemplary lessons to illustrate how their goals would be articulated and foster students' understanding. Music experts wrote curriculum critiques of the music series as a whole, as well as microanalyses of the second- and fifth-grade texts. Art experts also wrote sample lessons at the second- and fifth-grade levels.

Preliminary analysis suggests a strong agreement among university and teacher experts that there should be more in-depth attention to fewer concepts or key ideas rather than superficial coverage of a host of topics, concepts, activities, and media. All agree that ideal curricula should visibly emphasize the relationships among these more powerful ideas. Al-

though educators have argued for decades about the depth-vs.-breadth issue in curriculum, few changes in curricula or practices are evident in this regard.

Most experts agree that ideal curricula should provide students not only with instruction, but also with opportunities to actively process information and construct meaning. The nature and quality of processing and constructing, however, differ significantly from the instructional formats, level of questions, activities, and suggested extensions presented in most commercial materials.

Experts differed somewhat in their approaches to ideal curricula, within and across art and music. Those who had developed a coherent theoretical perspective about teaching and learning seemed more confident in making statements about ideal curricula than those who seemed less aware of the theoretical assumptions underpinning their claims.

An example of a developed perspective is the music expert who based her views of ideal curriculum and teaching on a conceptual framework that began with physical enactment (using the body to understand a concept such as high pitch), moved to "iconic representation and understanding (using nonmusical visual symbols corresponding closely to abstract musical symbols), and ended with encountering and understanding commonly used symbolic representation such as musical notation.

Another example was an art expert who relied on "concept development" and "problem-solving" as her theoretical lenses. She approached an ideal curriculum in terms of students being able to discriminate, categorize, and produce art forms through instruction focused on concept development; the reduction of distracting variables and variable outcomes in a given task; and calling students' products "tutored images" rather than "creations".

This approach suggests that a broad objective such as "creative expression" would not be of central interest in practice. Also, such an objective would not logically and theoretically undergird this curriculum as much as mimetic or objectivist theories and goals do. The latter

kinds of objectives emphasize perceiving and analyzing the internal elements of an art object and the coherent organization of these elements. Having students produce tutored images to demonstrate their understanding of an element or concept such as “line” or “foreground and background” is logically consistent with the conceptual framework of “learning as concept development and problem-solving”. One could use the same lens, problem-solving, and define it from a completely different perspective. This approach would result in a different presentation of the arts discipline to students, different purposes for problem-solving, and consequently different kinds of activities and outcomes.

Some of the experts relied on a potpourri of ideas from a variety of theoretical perspectives, sometimes resulting in contradictory objectives and outcomes. Given this proclivity to pick and borrow, they were less able to articulate a singular approach to teaching and learning in their disciplines.

Teacher experts were more apt than university experts to draw from a variety of ideas and resources. Most reasoned from their practical context and the challenge of pursuing multiple, competing goals with diverse learners: To reach all students, a variety of approaches is needed. Some teacher experts seemed confident that a bounded and distinguishable framework regarding their subject and how students learn would reach and teach most students successfully.

Some music experts had more difficulty than visual arts experts in isolating, categorizing, ordering, or relating key ideas and concepts in their discipline (e.g., explaining why one ought to teach rhythm before pitch or melody concepts, or why one idea is more complex, encompassing, or powerful than another). Some of this difficulty is due to the nature of music. Music has temporal and simultaneous qualities, and its understandings cannot be easily teased apart or sequenced in a tidy, linear, or rationalistic way. Music experts were more apt to insist that one has to teach and understand several concepts simultaneously, revisiting the same concepts successively through

different works and experiences over time because “that’s the way music is”. Art experts more easily isolated and sequenced concepts, although some also mentioned the complex features one must attend to simultaneously while responding to or creating visual art forms. While music is organized sounds and silence in time, art is organized images in space.

Yet music and art mean much more than this. Each area presents a unique language, discursive practices, symbols, codes, processes, objects, and experiences; but both are alike in their connotative features.

Both art and music experts expressed doubt that there is one “right way” to conceive or approach their disciplines, or that there is an inherent visible “structure” which would be recognizable to all in their fields—or even agreed upon. While artistic and musical ways of knowing may be different from each other as well as from mathematical ways of knowing, it is nevertheless difficult for experts to “map out” simple structures of their disciplines with definitive elements, relationships, and boundaries. No doubt mathematics and science experts also would have different ideas about the “structure” of their disciplines, how various ideas within these fields are related, and how their disciplines are related to others.

Teacher experts in this study expressed more attention to integration than did their university counterparts, that is, in connecting student experiences in their disciplines to other school subjects and activities to make learning more meaningful and enjoyable, or connecting students’ prior knowledge, informal understandings, and vernacular experiences with academic ways of knowing. Teachers expressed a keen interest in theme planning and interdisciplinary teaching across the curriculum. They did this not only to maintain program visibility and legitimacy, but they also seemed to genuinely believe that subject areas and topics can and ought to be linked in order to help children make sense of their learning and to apply and see relationships among disciplinary ideas. Like the depth-vs.-breadth issue, “integration” is not a clear concept.

It persists as a curriculum issue to be clarified and studied in practice, particularly in terms of how practitioners define and use it.

All arts experts addressed the need to use "authentic" representations and works in educating the young; that is, in using good music and art examples as opposed to contrived works that "talk down" to students, underestimating their capacities to understand, appreciate, or create quality art and music. While all experts considered activities like listening in music and viewing in art to be active, constructive endeavors, the teacher-experts were apt to submerge and highlight activities and content related to history, aesthetics, and criticism into long-range multidimensional production and performance activities. One would not expect to see a whole lesson on listening and responding to music, or viewing and discussing an art object, in these teachers' classrooms. One would see the infusion of aesthetics, history, or criticism and numerous examples of such (in objects, works, activities, and discourse) into their ongoing programs. For example, one expert teacher includes an extensive unit of understanding and creating opera in her elementary curriculum. Another includes a lengthy unit on local architecture in historical and social context. Her curriculum not only includes "classical" but contemporary examples such as local culture(s) and art in everyday life (as in commercial advertising) which students are likely to encounter and experience. As arts educators, we understand that neither the above examples is normal fare in most music and art programs at the elementary level, even in specialists' classrooms.

Expert teachers did not seem to succumb to decontextualized events like perfunctory public performances and exhibits. For expert teachers, exhibits and performances were natural outgrowths of well-planned curricula focused on developing musical and artistic understanding over a long term. These were not conceived as extensive disruptions to prepare for a holiday theme or performance. Most performances and exhibits were jointly defined, created, planned, and produced with students throughout the

year as a meaningful part of learning. These activities were not limited in arbitrary ways; they extended by theme and team planning and teaching or into special clubs, small-group and individual projects, and interesting out-of-school assignments.

Students also were encouraged to participate actively with the teacher in planning, implementing, and evaluating their own learning and the products of their learning. In interviews and sample lesson plans, expert teachers provided vivid examples of instructional discourse when explaining how their curriculum is enacted. They were adept in using metaphors, analogies, stories, propositions, hypotheses, and everyday examples that would be interesting, relevant, and understandable to most elementary students. When referring to their own practices, expert teachers modeled an inquiring and enthusiastic attitude in their instructional discourse; they made artistic decisions and interpretations visible to students; and they encouraged students to "think aloud", write, hypothesize, attend to subtleties, experiment with variations, improvise, reflect, and judge. There seemed to be more small-group activities, projects, and dialogue in experts' classrooms than isolated production of art objects or whole-group musical response and performance. When speaking about their goals and practice, expert teachers provided numerous examples of what their students were capable of doing, accomplishing, and thinking in art and music. Few spoke of students' ages, deficits, or diversity as serious obstacles to good practice or developing understanding and skills.

With respect to critiquing existing commercial curricula in music, neither the university nor teacher experts would use these resources faithfully, if at all. Most found the materials lacking on several dimensions. For example, the Silver Burdett & Ginn series was faulted primarily for its incoherence and disorganization; heavy focus on folk songs; little emphasis on reading music; redundancy of concepts across grade levels; unevenness in the presentation, treatment, and sequencing of concepts within and across grade

levels; and confusion, if not misrepresentation of some concepts. All experts stated that designing a textbook series primarily on the basis of a collection of "teachers' favorite and most successful songs" (according to the textbook authors' claims) does not provide a thoughtful, coherent framework for teaching music for understanding, even if the users are classroom teachers as opposed to specialists. The series does provide some good music selections to use on occasion.

Most of the experts found the listening lessons and evaluations related to those in Silver Burdett & Ginn to be valuable and balanced in content and style. The sixth grade text particularly had this strength. Few of the experts felt that the lesson format, supplementary activity books, tests, or suggested extensions would foster understanding, critical thinking, plausible interdisciplinary connections, meaningful application, or independent and self-regulated learning; most of these were perceived as "busy work". Experts suggested that this series seriously underestimates children's capacities and abilities at the elementary school level. Most of the experts claimed that students are presented for six years with many concepts in music that they already understood fairly well upon entering first grade. Textbook authors and specialists may be overcompensating with unnecessary repetition and low expectations because of their sensitivity to students' limited encounters with music and lengthy gaps in formal instruction.

### **Commonly Used and Distinctive Curriculum Materials**

The center's comprehensive study analyzing commonly used and distinctive curriculum materials is nearing completion. The music curriculum targeted for analysis as "commonly used" was Silver Burdett & Ginn's *World of Music* (1988) because of its national market-share status. Holt, Rinehart & Winston's series *Music* (1988) and G.I.A. Publication's *Jump Right In: The Music Curriculum* (1985) were selected as distinctive music curricula in terms of their potential to foster students' understanding. At this writing, these materials are still being

analyzed. Although there is no commonly used curriculum in visual arts at the elementary level, two commercial curricula are being analyzed: *SWRL* (1977), published by Phi Delta Kappa, and Chapman's *Discover Art* (1985; revised 1987), published by Davis Publications.

The major questions framing the curriculum analysis are: How well could these materials foster students' understanding of art or music and higher order applications? If used blindly as authoritative, expository text by teachers and students, to what extent might the intended and enacted curriculum promote deeper understanding and appreciation of art and music? How might a curriculum resource or text be particularly "distinctive" and helpful to teachers and students in this regard, without being overly prescriptive?

The center's approach to the analysis of curriculum materials is unique in two major ways. First, the critiques go beyond mere content analysis. They include a comprehensive, integrated, and qualitative set of framing questions that are organized around eight categories: goals, content selection, content organization and sequencing, content explication in the text, implied teacher-student relationships and likely classroom discourse, activities and assignments, assessment and evaluation, and help/directions to the teacher. Secondly, all researchers are applying the same set of questions to their respective subject-specific materials, enabling the examination of similarities and differences in curriculum materials across subject areas. Thus, common strengths and problems across content areas can be identified as well as strengths and problems unique to particular content areas.

Many of the center researchers' findings regarding *World of Music* by Silver Burdett & Ginn mirror those from the "expert" study. It is a colorful collection of songs, recordings, and teacher resource materials for levels K-8. The series seems to be targeted primarily for classroom teachers' use. Kodaly and Orff activities are incorporated into the series for specialists. Each grade level in the series is divided into four sections: 1) "Music for Living", songs related to social, historical, and cultural ideas and values;

2) "Understanding Music", songs to be presented sequentially to teach musical concepts; 3) "Sharing Music", music written and arranged for public performance and suggestions for programs; and 4) "Sing and Celebrate", songs for holidays and special occasions. This organization leaves much to be desired because there is little difference among the sections, and the important section on "Understanding Music" appears second in the text. Finally, the average number of songs or lessons in the "Understanding Music" section represents only about 35 percent of the series. "Key strands" in the series are said to provide "a structured learning program"; yet one finds little structure or coherence related to concept development, listening skills, music reading, movement skills, or performance skills. One cannot tell in the introductory pages which strands are more important than others in developing musical understanding, skills, and appreciation. If the strands are thought by the authors to be equally important, they are not presented equitably in the series.

The objectives chart and multiple cross-references are purely cosmetic because one must flip back and forth to figure out what the objectives really are for each lesson. Often the objectives listed are not what is emphasized in the lessons. Even if one were to teach the "minimum program" (boldfaced objectives), students would have little understanding of musical concepts or how these concepts are related. (Several concept mappings within and across grade levels were part of the curriculum analyses and will be reported at a later date.) Concepts rarely move toward principles or main ideas, and rarely are they linked and interrelated in progressively interesting or complex ways. There is little help for students to build their understandings or link concepts over time.

Noticeably absent in the series is a well-articulated theoretical framework about music or how students learn music with supporting units, lessons, and guidelines for developing students' understanding that reflect this viewpoint adequately. There are serious problems with vertical articulation, perhaps due to multiple

authorship and poor editing. Of the grades 1 through 6 texts, there are no less than eight primary authors, a theme musical author, and a movement author. Many of the supplemental books were written by additional authors.

There are considerable differences between grade levels, perhaps due to multiple authors. For example, the Grade 6 authors offer nearly 140 lessons in relation to an average of about 114 in the grade 1-7 texts. There is more attention to popular culture in Grade 6, and some of the concepts and topics are presented differently than they were in the earlier grades. Grade 3 seems to be a much more substantive text than Grade 2 in terms of developing musical concepts, and these levels were written by different authors. Thus, in some respects there are quantum leaps and stark differences between grades 2 and 3 and between grades 5 and 6. There are fewer tests in grades 3 and 6 than in the other grade levels, and most of the tests in the series require low-level, visual discrimination skills. There are significantly fewer "What Do You Hear?" tests in grades 1 and 2 than in other levels. As a whole series, there is little evidence of activities and social structures that would foster critical thinking and musical discourse. One exception is in Grade 2 with regard to reinforcement of a "What Do You Hear?" test on the concept of "form". This is an exemplary activity that would foster musical understanding and higher order applications of concepts. The "What Do You Hear?" tests, on the whole, seem more meaningful for developing musical understanding than the regular tests. Unfortunately, the balance between these two kinds of tests is about equal in the series.

Even when grade-level texts are authored by the same persons, there are noticeable differences. The grades 1 and 2 texts are quite different in format and information given (or not) to the teacher, even though they were written by the same authors. There are few new or expanded concepts presented in Grade 5, although this level and Grade 4 were written by the same authors. Finally, the work of "special authors", particularly the movement author, is not integrated



well into the series and leaves much to be desired. Some pronouncements by this author are questionable: "Clapping the beat is a difficult coordination that should be delayed until the second grade" (Grade 1, p. 328) Yet in the Grade 1 text, as early as Lesson 5, children are asked to clap. In the lesson preceding this one, students were asked to accompany music with rhythm sticks, woodblocks, drums, maracas, and finger cymbals. The two charts in the back of each text regarding student development in coordination and a prescribed sequence for relating language to movement are ignored, both by the movement author herself and by the grade-level text authors. Thus, what appears to be attractive, comprehensive, and marketable about this series is really incoherent, illogical, and superficial.

*World of Music* emphasizes identification, recall, imitation, and low-level isolated discrimination skill rather than content or experiences that would help students develop understanding about the relatedness of musical concepts, creativity, listening, audiation, aesthetics, criticism, and the sociocultural context of music beyond folk songs. Hypothesizing, problem-finding and -solving, application, composing, interpreting, improvising, and so on, are severely lacking in the series. This is due to the disorganized way concepts are presented, ordered, emphasized, or dropped; the unimaginative lesson format and instructional discourse likely to emerge from this format; the recommended extension activities and artificial interdisciplinary links; and the nature and quality of tests or evaluation devices. There is much ambiguity and disorganization in the concepts as presented, both visually and verbally. Some of the visual cues are downright incorrect—not merely confusing or misleading. Without a teacher who is able to create coherence and organization where none exists, students are likely to learn that music means learning and singing a song each week and tapping a steady beat. Also, there is little assistance to teachers on how to assess individual students' understanding, progress, and achievement in music, or how to report this progress to parents.

*Discover Art* (Chapman, Art Education,

1985) is a visual arts series for grades 1 through 8 targeted for use by both specialists and classroom teachers. The goals—providing for creative art activity, developing perceptual awareness, and building awareness of art in everyday life—are articulated well through three interrelated themes at every grade level: creating art, looking at art, and living with art. The goals and outcomes are clearly articulated and applied well throughout the lessons at each grade level, as well as vertically throughout the series. Activities are interesting and appropriate by grade level, allowing for some degree of experimentation. A variety of cultures and media is represented in the artworks discussed and produced by students. The author presents art vocabulary at each grade level, enabling students to engage more effectively in their talk about art. She stresses that there is no "one right answer", and that students should be encouraged to develop informed opinions.

At each grade level, content is presented in 60 lessons. The first eight to ten "introductory" lessons involve learning basic art concepts and skill (line, shape, pattern, color mixing). These concepts are repeated at the beginning of each grade-level text. The author claims that these introductory lessons are "varied at each level so that students . . . expand their understanding and apply the basics in new ways" (p. IV). In actuality, most of the lessons are highly similar in grades 1, 2, and 3, and in grades 4, 5, and 6. Thus, there may be more repetition among grade levels than is necessary in terms of using the same art media, subject matter, or skills in the name of revisiting these "basics". For example, there are six lessons on clay sculpture in grades 1 through 3 that involve making clay animals or people, with emphasis on adding texture. Coils are repeated from grades 2 through 6. Making clay people is repeated throughout the six grade levels, whether pinching, coiling, using clay slabs, or carving from blocks in the sixth grade. Also, each grade level contains an identical section on architecture in which students are to create a model using cardboard forms. The demonstration diagrams

also are identical. Such redundancy across grade levels seems unnecessary and unproductive, especially since there is usually so little time allocated to the arts. The author states that the reason for lesson similarity at the different grade levels is “to allow for a planned and economical, school-wide use of community resources such as visiting artist programs, special assemblies, museum field trips, film showing and the like” (p. VI). The rationale for this connection is not explicated.

The majority of lessons involve students in art production. In most lessons, rather than students drawing inferences as to why people create art, the teacher’s edition directs the teacher to explain the reasons to students. Often, this question is not addressed directly at all. Through repeated lessons, students are told that “inspiration” comes from observation, a desire for decoration, and one’s imagination. However, “inspiration” for the students’ artwork is predetermined by the text and teacher, and experimentation is primarily teacher-initiated and -directed.

There is a great deal of emphasis on perceiving—visual discrimination of art objects. This focus could provide an excellent opportunity to engage in more complex discourse, but students usually are asked for literal responses such as “identify shapes by name and size” or “name the cool colors in the painting.” Creative problem-solving is seldom seen in lesson objectives. A conceptual understanding of design elements and principles is stressed repeatedly through lessons where students are to apply what was encountered in previous lessons. There is some attention to metacognition and students’ documenting changes in ideas/work over time, such as, “Guide the discussion so that students notice specific changes from one drawing to another.”

To develop conceptual understanding and higher order thinking, students often are asked to compare and contrast works of art, and they are asked to infer why an artist may have used a particular color or technique. This is a commendable feature of the series because this sort of examination introduces youngsters to various interpretations of the same subject matter and to different schools or styles of art in

a manageable and comprehensible way. Each lesson format has a section on “evaluation” where students are asked to view or discuss their own art work. For example, “Hold up several of the dry paintings and discuss various kinds of light the students have shown.” Also, there are some opportunities for small-group activities and discussion rather than whole-class response.

Despite the author’s claim of equitable attention to the three goals, there are seldom references to roles in art for those who do not wish to become artists; so the series remains production-focused. Despite attention to art in various cultures or times, the series forwards a “universal”, sometimes sexist, view of art (primarily white Western culture). For example, of all the illustrations of students engaged in demonstrations for the reader, 93 percent are white, and 64 percent are female. Of “adult artists at work” featured in the series, 71 percent are white. There is a great deal of emphasis on perceiving art objects as forms to be analyzed by their elements of design (an objectivist theoretical orientation), much like decoding or phonics may be called “reading.” Modern art or provocative content and subject matter are not too evident in this series, as is the case in most other subject area textbooks. Most of the artworks featured (about 70 percent) are two-dimensional (drawings or paintings) versus three-dimensional forms such as sculpture, textiles, masks, or mobiles. What is unique and commendable about the series is the inclusion of youngsters’ artwork as worthwhile examples for student examination and discussion.

The lesson format incorporates a potential springboard for rich discourse, reflection, and evaluation of students’ work and ideas. Classroom teachers, however, may need more guidance as to what to do with student responses to open-ended questions and how to weave these into meaningful discourse. Specialists may have more background knowledge in art which would facilitate students’ interpretations and ideas in more provocative and in-depth directions than classroom teachers.

Assessment or evaluation in individual lessons usually involves group response,

discussion, critique, and review. The teacher's primary tool for evaluation of student understanding is whole-group questions and response; so assessing what individual students understand and have learned may be difficult. At most grade levels, students are evaluated "formally" only twice a year in terms of their ability to "look at art" and "create art." These two reviews occur after the first 30 lessons and after the remaining 30 lessons, and it is unclear as to why there isn't consistency in the number of reviews per grade level, or why more sophisticated dimensions aren't being assessed at successive grade levels. Finally, mid-year is a tad late to identify and "re-teach concepts that some students may not have grasped thoroughly" (Grade 2 test, p. 64).

On the whole, most classroom teachers and specialists would be able to use this textbook series with a fair degree of ease. Examples of students' drawings in the front of each grade-level text illustrate the variation of students' representations one might expect within and across grade levels, rather than suggesting there is one desirable level or "average." Necessary art supplies, management of materials, and techniques are illustrated clearly. It is unlikely that most school districts will be able to purchase whole grade-level sets of student texts. Thus, to be successful, the teacher will need to purchase or develop accompanying resources that are alike or similar to the marvelous color photos and illustrations throughout the textbook series (slides, large art prints, filmstrips, etc.). No bibliographies of publishers, catalogues, or companies are listed. If such resources have been developed for use by the publisher, these are a minimal "must" purchase along with the teacher editions. With the growing impetus of discipline-based art education (DBAE) statewide and nationally, *Discover Art* may become a number-one resource for teachers and curriculum developers alike. Without corresponding visual resources or the purchase of student texts, however, there may be little long-term impact on practice.

Background information about some of the artists and artworks used in the series would be helpful to both classroom

teachers and specialists. There are few suggestions for individualizing instruction or accommodating students' diverse abilities and interests. There is little assistance on how to assess individual student progress, understanding, or achievement, and how to report progress to parents. Letter and numerical grades are discouraged but "notes" to parents about an individual's progress, interests, and special achievements are encouraged. One wonders how either itinerant specialists with hundreds of students or classroom teachers who teach several subjects could document individual progress effectively or accomplish reporting as described. This suggestion, however, beats *carte blanche* "satisfactories" for trying, participating, and behaving—dimensions often reported as evidence of learning in elementary art and music.

### **Curriculum Analyses Impact**

When completed, the curriculum analyses will provide detailed, descriptive information and suggestions for improved design and use regarding the range and nature of curricula available to classroom teachers interested in teaching for higher level thinking and problem-solving in each content area. We know that most teachers adapt existing curricula and embellish or transform these in a variety of educative ways. But the risk of miseducation is greater when those who may feel ill-prepared to teach the subject in the first place rely heavily and uncritically on commercial materials. Curriculum developers and policymakers recommending improvements can benefit from a more comprehensive understanding of how curriculum materials influence what gets taught and learned in elementary school.

### **Case Studies of Teaching and Learning for Understanding**

One of the major initiatives this year involves several case studies of elementary art and music teachers' intended and enacted curricula. The primary thrust of these case studies is to describe practice which seems to foster students' understanding and problem-solving in visual arts and music. These qualitative studies of art and music specialists include

sustained classroom observation of the enacted curriculum; multiple formal and informal interviews with teachers and students about what is being taught and learned and why; examination of teachers' unit and lesson planning; analysis of curricular materials and resources used; the nature and extent of evaluation; and examination of local policies and organizational arrangements which specialists find supportive of meaningful teaching and learning. Some of the case studies will be conducted over several weeks; others will be extended over the entire school year. Researchers are particularly interested in documenting how children make sense of their art and music experiences, and what and how they learn in these subjects within the social context of classrooms.

## Summary

While many of the reports from the arts-related studies are not yet complete, most will have been published by early 1990. The findings of all center research are published by the IRT in the Elementary Subjects Center Series. Information about the center is included in the IRT *Communication Quarterly*, a newsletter for practitioners, and in lists and catalogs of IRT publications. For more information, to receive a list or catalogues, or to be placed on the IRT mailing list to receive the newsletter, please write to the Editor, Institute for Research on Teaching, 252 Erickson Hall, Michigan State University, East Lansing, Michigan 48824. Co-directors of the Center are Jere E. Brophy and Penelope L. Peterson. Senior Researcher for the Arts is Wanda T. May.

## References

- Beethoven, J., Davidson, J., Nadon-Gabrion, C. (1988). *World of Music*. Morristown, NJ: Silver Burdett & Ginn. (Grades 3-5 authors).
- Chapman, L. (1985). *Discover Art*. Worcester, MA: Davis Publications.
- Culp, C., Eisman, L., Hoffman, M. (1986). *World of Music*. Morristown, NJ: Silver Burdett & Ginn. (Grade 6 authors).
- Freeman, D. (1989). *State guidelines for reshaping academic curricula in elementary schools: A 50-state survey*. (Elementary Subjects Center Series No. 10). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Teaching and Learning of Elementary Subjects.
- Gordon, E. & Woods, D. (1985). *Jump right in: The music curriculum*. Chicago, G.I.A. Publications.
- May, W. (1989). *Understanding and critical thinking in elementary art and music* (Elementary Subjects Center Series No. 8). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Teaching and Learning of Elementary Subjects.
- Meske, E., Andress, B., Pauta, J., & Willamon, F. (1988). *Music*. NY: Holt, Rinehart & Winston.
- Palmer, M., Reilly, M., Scott, C. (1988). *World of Music*. Morristown, NJ: Silver Burdett & Ginn. (Grades 1 and 2 authors).
- Rosaen, C. (1988). *Interventions to teaching thinking skills: Investigating the question of transfer* (Elementary Subjects Center Series No. 6). East Lansing: Michigan State University, Institute for Research on Teaching, Center for the Teaching and Learning of Elementary Subjects.
- SWRL Educational Research and Development. (1977). *SWRL*. Bloomington, IN: Phi Delta Kappa.