Can We Speak the Language?
Toward an Understanding of Standardized Testing
Techniques and Alternatives with an Examination of
States' Approaches to Assessment of the Visual Art Student

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The December 1986 issue of the NAEA News proclaimed "States Move Toward Testing in the Arts. In all, 12 states and the District of Columbia were identified as having some state level means of assessing student achievement in the visual arts (Council of Chief State School Officers, 1985; National Art Education Association, 1986). Determining whether or not these state instruments actually existed and, if they did, to what extent the instruments satisfied criteria used to evaluate standardized tests became the basis for my study.

The Study

Correspondence was initiated in May of 1987 with the following states: Connecticut, Delaware, Hawaii, Louisiana, Maryland, Michigan, Minnesota, Missouri, Pennsylvania, South Carolina, Utah, Wisconsin, and the District of Columbia. Copies of the tests, technical manuals, information about the manner in which the tests were developed, and any additional publications about the states' visual arts assessment programs were requested. (Indiana was later added as a state piloting visual arts assessment tests.)

As the research progressed, it became apparent that the language of the test and measurement field was unfamiliar. There seemed to be slight overlap between my recently developing art education academese and the jargon of psychometricians, with one striking exception,the word "accountability". The review of literature was expanded to include not only works from the field of art education concerning the evaluation of student learning (Chapman, 1978; Eisner, 1975; Gaitskell, Hurwitz, and Day, 1982; and Wilson, 1971), but also works from the test and measurement field regarding standardized tests and their traits (Anastasi, 1982).

Readings by Anne Anastasi, a noted leader in the test and measurement field, yielded a "Suggested Outline for Test Evaluation" (Anastasi, 1982). This outline was selected to guide the critical review of the state level art assessment instruments which could be categorized as standardized tests.

Important characteristics according to Anastasi's outline included: (1) General information such as the title, author, publisher, time required to administer, and cost; (2) a brief description of the purpose and nature of the test including the type of test, target population, nature of content, possible existence of subtests, and test item construction; and (3) practical considerations, such as design of test booklet, editorial quality of content, appropriateness, ease of use, ease of administration, clarity of directions, scoring procedures, examiner qualifications and training, and face validity and examinee rapport. Technical information to be noted included norms,

reliability, and validity and the manner in which they were derived.

Anastasi's outline further suggested that reviews in publications such as the **Mental Measurements Yearbook** were to be sought, and a summary evaluation written.

The Results

Upon receipt of information from the various states, three categories of responses evolved. The first category was composed of states whose replies indicated that assessment in the visual arts did not exist or that visual arts assessment was included in fine arts assessments in an abbreviated fashion, perhaps three or four questions. Seven of the original twelve states fell into this category. These states were Delaware, Louisiana, Maryland, Missouri, South Carolina, Wisconsin, and Pennsylvania.

The second category consisted of responses which indicated work in the development of techniques for evaluating student achievement in the visual arts at the state level. This group included: (1) Indiana and the District of Columbia, who were in the process of piloting tests; (2) Michigan, who had researched possible art questions; and (3) Hawaii, who responded with a comprehensive model for evaluating the art education program.

The third category was that of states from which state level standardized visual arts assessment tests had been sent. Three states sent tests. These states were: (1) Connecticut, who conducted an art assessment in 1980-1981, (2) Minnesota, who conducted art assessments

in 1981-82 and 1985-86; and (3) Utah, who sent course-oriented achievement tests copywritten in 1985 and 1986.

In this paper, general characteristics of the tests received will be noted, and the student sections of the art program evaluation model from Hawaii will serve as an example of an alternative approach. Concluding comments will focus on issues which surfaced during the course of the study about the evaluation of student learning.

Connecticut and Minnesota

The tests from Connecticut and Minnesota (Connecticut State Department of Education, 1981; Minnesota Department of Education, 1981, 1982; and National Evaluation Systems, 1981) were modeled after the National Assessment for Educational Progress in Art (NAEP) of 1974-75 and 1978-79. The majority of test items were selected from the NAEP released set of items (National Assessment of Educational Progress, 1980) and were chosen with local educational objectives in mind. Both states' tests were directed toward samples of students in the 4th, 8th, and 11th grades. Included were sections measuring student knowledge, attitudes, and experiences. Certain results in Connecticut were compared with result of students of the same age on the NAEP. Minnesota compared results from their second testing to results from their first. Minnesota's testing booklets did have two comparable sections, a package A and a package B, which would indicate possible use of a split half reliability process.

Utah

Utah's tests (Utah State Board of Education, 1985, 1986) appeared to be in an ongoing developmental process administered in selected school districts. They are linked directly to the state level curriculum guide.

The stated purpose of the tests was to find out what students have learned about art and how they liked it. However, no questions are posed regarding student attitudes or experiences. There were three test levels with two test forms of similar content at each level. Questions were to be read out loud at all levels, and certain questions were present in each of the three levels to facilitate student progress evaluation. Items were multiple choice, some with line drawing visuals and some with small prints as visuals. Content of areas tested included knowledge of selected elements and principles, ways of achieving perspective, color blending results, "correctness" of artwork, and awareness of historical exemplars.

No technical manual was available so information regarding test results and their use, outcomes of reliability and validity processing, actual sample groups tested, and test item specifications are not known.

Hawaii

The student sections of the art program evaluation model draft from Hawaii (Lai and Shishido, 1987) included an evaluation of student art performance by the classroom teacher in which the relative level of the student within the class is noted - top third, middle third, or bottom third. A varied and comprehensive listing of student abilities which would have been learned or developed within the art classroom served as a checklist for

both teacher and an independent interviewer. Student work was reviewed with the estimation of approximate grade level in mind, and a checklist of common characteristics of student artwork at a particular grade level was used as a format for commentary.

Classroom teachers were also requested to submit copies of tests which they had developed with remarks on content, lesson objectives, and testing setting, though test results are not requested in these forms. Further observation by an independent interview team included videotaping and photography of lesson process and outcome.

Concluding Comments

As the study progressed with the review of the assessment instruments which were sent and an extensive review of literature on evaluation of student learning in the visual arts, several issues appeared remarkable.

- * It is important for art educators to recognize the complexity of the issue of evaluation of student learning. Various approaches may be used to chronicle and disclose a positive student growth. Art educators benefit from having skills both to critique these various forms and to be able to develop and advocate specific approaches.

- * Test sample student learning, and students are fractionally represented when numerical results alone are used as evidence that learning has taken place (Finlayson, 1988).

- * As art educators examine issues regarding student evaluation, it is important to be aware that the emphasis in general education on the

development of critical thinking skills (Ennis, 1985; Quellmalz, 1985; and Stiggins, Rubel, and Quellmalz, 1986) is creating a movement toward refining and restructuring questioning strategies and concepts of appropriate evaluative techniques.

* A need exists to advocate representation of the whole student in evaluative procedures both in art education as well as in general education. Much may be contributed to general education from art educators' attention to sensitive representation of student learning.

References

- Anastasi, A. (1982). **Psychological testing**. New York: Macmillan.
- Chapman, L. (1978). Evaluating children's progress in art. **Approaches to art in education**. New York: Harcourt Brace Jovanovich.
- Connecticut State Department of Education. (1981). **1980-81. Connecticut assessment of educational progress. Art. Grade 11 (Test)**. Hartford, Connecticut.
- Council of Chief State School Officers. (1985). **Arts, education and the states, a survey of state education policies**. Washington, DC: Author.
- Eisner, E. W. (1972). Children's growth in art: Can it be evaluated? **Educating artistic vision**. New York: Macmillan
- Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. **Educational Leadership**, 43 (2), 44-48.
- Finlayson, S. J. (1988). **A critical description of selected state level visual arts assessment instruments**. Unpublished Master's Thesis, University of Oregon, Eugene OR.
- Gaitskell, C. D., Hurwitz, A., & Day, M. (1982). Evaluating children's progress in art. **Children and their art**. (4th ed.) New York: Harcourt Brace Jovanovich.
- Lai, M. K. & Shishido, J. (1987, April) **A model for evaluating art education programs**. Paper presented at the annual meeting of the American Educational Research Association.

Lowenfeld, V. & Brittain, W. L. (1987). **Creative and mental growth** (7th ed.). New York: Macmillan.

Minnesota Department of Education. (1981). **Minnesota educational assessment program. Secondary visual arts** (Test). St. Paul, Minnesota: Author.

Minnesota Department of Education. (1982). **Minnesota educational assessment program. Elementary visual arts** (Test). St. Paul, Minnesota: Author.

National Assessment of Educational Progress. (1980). **The second assessment of art, 1978-79. Released exercise set** (Art Report No.-10-A-25). Denver: Author.

National Evaluation Systems. (1981). **1980-81 Connecticut assessment of educational progress. Art and music. Technical supplement draft**. Amherst, Massachusetts: Author

Quellmalz, E. S. (1985). Needed: Better methods for testing higher-order thinking skills. **Educational Leadership**, 43 (2), 29-35.

Stiggins, R. J., Rubel, E., & Quellmalz, E. (1986). **Measuring thinking skills in the classroom**. Washington, D. C.: National Education Association.

Utah State Board of Education. (1985). **Art achievement inventory: Test A, B, C, D, E, F**. Salt Lake City, Utah: Author.

Utah State Board of Education. (1986). **Art achievement inventory: Test A, B, C form I, Test A, B, C form II**. Salt Lake City, Utah: Author.

Wilson, B. (1971). Evaluation of learning in art education. In B. Bloom, T. Hastings, & G. Madaus, **Handbook on formative and summative evaluation of student learning**. New York: MacGraw-Hill.