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## ABSTRACT

For many people, school reform means taking the responsibility for goal setting away from teachers and assessing common student accomplishments, but the costs and benefits of this accountability strategy have not been determined. The difference between the aims of education represented by test scores, and those represented by the activities of the classroom is much greater than most educators realize. The conflict between differentiation and standardization of aims is examined on the basis of field work in arts classrooms in elementary schools. The focus is on the intellectual aims of developing a cultural knowledge base and developing imaging and other powers. A review of several studies conducted by the author and colleagues and a look at other literature in the field suggest that the difference is essentially between seeing fine arts achievement as an attained ability versus seeing it as command of an itemized inventory of knowledge, technique, and sensitivity. Current standardized tests measure achievement. These two views are so different that the panorama of achievement to which art teachers aspire cannot be represented with validity with the type of standardized achievement tests in use today. Three figures illustrate the discussion. (SLD)

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DIFFERENTIATION AND STANDARDIZATION OF AIMS

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## Differentiation and Standardization of Aims<sup>1</sup>

Robert Stake, University of Illinois

From school to school across America, we find little effort to voice the purposes of arts education. Is that a problem? Not necessarily. Does that mean arts education is without purpose? Of course not. Most of us have been impressed with Polanyi's (1958) demonstrations that articulated purpose is not essential to effective communication. Recalling the outstanding arts programs in the Getty case studies (Day, et al., 1984), I would not characterize them as articulate in stating the aims of instruction.

But in recent years, school reform pronouncements have claimed that to improve schools, the aims of learning will be specified and they *will be standardized*. Laura Chapman (1982) reported ten years ago that school district syllabi were increasingly claiming the need for explicitly stating instructional purposes. And so today, in district after district, standardized goal statements have been published. These statements are broad, elevated, and in tune with the aspirations of most curriculum specialists. Few teachers pay attention to them. From our studies, we know that teachers teaching elementary school arts pay attention to purposes embedded in their customs and cherishings (Stake, Bresler, and Mabry, 1991). They draw from their experience: what they have known, what they have grown to care about.

For many people, school reform means taking the responsibility for goal setting away from teachers and assessing common student accomplishments. The costs and benefits of this accountability strategy have not been determined. The difference between the aims of education represented by test scores and those represented by the activities of the classroom is much greater than most educators realize. In this paper, on the basis of fieldwork in arts classrooms in elementary schools across the country, I examine the conflict between differentiation and standardization of aims.

**The aims of arts education.** In our case study for the Getty Center, working with elementary school teachers, Robin McTaggart, Marilyn Munski, and I (Day, et al., 1984) identified seven more or less latent instructional purposes--namely to develop a youngster's (1) cultural knowledge base, (2) imaging and other powers of conceptualization, (3) artistic expressiveness, (4) self-understanding, (5) membership in and support for the arts, (6) opportunities for enjoyment and change of pace, and (7) appreciation of the arts. The first two are intellectual, the next four attitudinal, together constituting a background for the seventh: appreciation, a cherishing of the arts, or better, an enlightened cherishing, an aesthetic beholding of the arts.<sup>2</sup> This paper is primarily concerned about the first two, the intellectual aims and how they are differentiated and standardized in arts education policy and practice.

With extended observations in 1988 and '89 in ordinary, self-contained, elementary classrooms across the country, Liora Bresler, Linda Mabry, and I again discerned these seven aims. We asked and we watched. Explicating goals was not what the teachers were good at. With little enthusiasm, many teachers alluded to a purpose or two. Priority was certainly not well spread across those seven purposes. Three were stated most frequently: (1) cultural knowledge, e.g., to know of Van Gogh and Mozart, (2) opportunities for enjoyment and relief from academic pace and (3) artistic expression and creativity. Numbers (1) and (3), culture and creativity were aims voiced more often than pursued, except as "creativity" is used to mean "productivity." True to their word, those teachers who spoke of (2) opportunity for enjoyment and change of pace, were found to offer a less academic, more informal ambiance during arts lessons.

<sup>1</sup> A paper for presentation at the 1993 annual meeting of the American Educational Research Association.

<sup>2</sup> These purposes are not unlike those identified by Jerry Hausman (1963), Arthur Efland (1979), and others.

One goal seldom mentioned in the classrooms we visited was that of fostering conceptualization. Well out of earshot were the exquisite arguments of Harry Broudy, Elliot Eisner, and Howard Gardner<sup>3</sup> to the effect that study of the arts sophisticates the powers of imagery, illustration, allusion, and metaphor. Most educators in these schools were unaware of such claims. Nor did it appear unconsciously expected that participation in the arts or beholding of artistry would enhance mental and verbal imagery.

In seven elementary schools, we found conceptualization goals seldom spoken and seldom pursued as a priority. But what about *incidental* pursuit of conceptual goals? We found lots of it. Whether sophisticated or not, the teachers we observed regularly elaborated their exercises and projects with facts, relationships, rationale. For example, take Bill Love's intermediate band class in Anacortes, Washington (Stake, Bresler and Mabry, 1991, page 35):

The middle school students in this class travel two blocks by school bus to the high school. Today about 44 students have gathered in the band room. Seats are arranged in orchestra formation. After individual warm-up, with a spontaneous *Oh, My Darling Clementine*, Bill Love puts them through five minutes of scales. Then come make-up exams. At least once every two weeks each student is expected to play a dozen bars solo. The student chooses the piece, it is played by all, then while the group remains reasonably quiet, the examinee plays his/her part. Love makes a few diagnostic, suggestive comments. The students are aware that the best and worst performance gets criticized about equally gently.

Then, together, the band works on special passages. Today they play *A Technic Tune*, repeating it several times. Love stops them to review concepts and notations. Articulations: slur, staccato, accent, tenuto. A few youngsters are able to identify them. On to *That's Where the Money Goes*. More technical terms, particularly about syncopation. Bill Love demonstrates the different syncopations. Then he redirects the snare drum so as to change the presentation, explaining his reasoning to whomever cares to listen. Conceptualization is important, but--if the two are separable--it seems aimed more at bolstering performance than at enhancing understanding. Still conceptualization is there, whatever the conscious intent.

The teachers' manifest intellectual aims, i. e., to create a knowledge base and to develop conceptual skills, continue to subdivide. The knowledge base includes not just knowledge of cultural heritage but knowledge of production, concepts from actually making art. Formalized generalizations about the arts, such as theory of music or the elements of graphic presentation, constitute additional knowledge bases. The epistemology of arts education is complex; yet much of it is to be found, sometimes incorrect, but available for observation, in exemplary classes, of course, but also in the classes of teachers untrained in arts education. The complexity of purpose is universal.

**Abilities and knowledges as different.** At some level, we all know what theatre and poetry and sculpture are. For many people, and more than a few teachers, such common art forms seem not to need definition. But that perception is problematic. The fine arts embrace an infinite array of concepts and operations. No two people place boundaries the same. The definition of *arts education* is just as slippery. Teachers draw from mainstream *and* remote corners of the art. Only

<sup>3</sup> The discipline-based advocacies of the Getty Center for Education in the Arts have given new life to the writings of Harry Broudy (1977, 1990), Elliot Eisner (1982) and Howard Gardner (1982) who called for seeing the arts as central to the process of education, central to the development of intellectual acuity.

some artistries are worthy of precious classroom time and few of them, perhaps none of them, are important enough for all to learn<sup>4</sup>. The concepts and operations engaged greatly outreach even the teacher's own description of the course. Extending that to curricular propagation, the detail and the realm of fine arts courses outreach the best of definitions.

Neither good nor bad teachers stick to the point. Good teachers roam the adjacent terrain, point out and extend major connections, introduce concrete situations of relevance. Fine arts knowledge and skill are not assemblies of unconnected elements. Each task and idea is linked into various networks of knowledge, various traits, various systems of thinking. Take the concept, "brush strokes." Brush strokes and texture are closely linked, brush strokes and signatures are less close, yet linked in several ways. The several links become many when contexts are acknowledged. The contexts of art are too numerous to itemize in tables of content, lists of objectives, lesson plans--yet the practicing teacher, not only deliberately but subtly and unconsciously, reveals further dimensions of knowledge for each action and concept.

Arts teaching and learning can be summarized in ability-oriented goal statements such as those (shown in Figure 1) for Illinois school children. Much of what a teacher does can be categorized under one or more of these goal statements. But the goal statements do not suggest the sequential experiences good teachers arrange for attaining those learnings. Research shows that the teacher is seldom looking at the accomplishment of long range behavioral goals (Eisner, 1969; Stake, Bresler and Mabry, 1991). The teacher is looking at the involvement of the children in activities and the immediate accomplishment of short range goals. Many arts education specialists would like the teacher to be more oriented to long range goals but the fact of the matter is, those goals can be pursued with simplistic activities or with discipline-based and deeply reflective activities. The teacher risks too narrow a purview by concentrating on ability-centered goal statements.

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Figure 1. State Goals for Learning<sup>5</sup>

As a result of their schooling, students will be able to:

- understand the principal sensory, formal, technical and expressive qualities of each of the arts;
  - identify processes and tools required to produce visual art, music, drama and dance;
  - demonstrate the basic skills necessary to participate in the creation and/or performance of one of the arts;
  - identify significant works in the arts from major historical periods and how they reflect societies, cultures and civilizations, past and present;
  - describe the unique characteristics of each of the arts.
- 

**Content inventories.** In the backs of our heads, we all have epistemological inventories of learnings running deep into and beyond the goals of fine arts education. These inventories are particularly broad when we include the many contexts and metaphoric uses of the arts. The

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<sup>4</sup> I resist Ralph Smith's (1990) advocacy of an essential cultural literacy but mostly as a matter of degree. Some concepts and works of art are worthy of teaching broadly, others only as the situation calls for them. It is important for fine arts education scholars to indicate their priorities for teaching but the better teachers compromise with situational opportunity, student talent, and peer group interests.

<sup>5</sup> Taken from State of Illinois Goals, 1986.

inventories often are organized around a conceptual superstructure, a powerful but simple structure such as in Figure 1. Few of them reflect the complexity of arts education to be found by master teachers even in primary school. Inventories of teaching and learning, when it is possible to record even some parts of them, show that complexity. They reveal the teacher's conception of the nature of fine arts education. The inventories even of inexperienced or ineffective teachers are complex.

For basic understanding of--let's say--a dance teacher's perception of achievement, we need content *inventories*, not just choreographic and movement categories but inventories detailing a manifest definition of education, illustrating the complexity of teaching and learning in their own studio or the classrooms they visit. Even people who know little of dance can identify a few steps, e.g., pirouette, allamande, and shuffle off to Buffalo. But experienced teachers go beyond the clichés, beyond the categories, in their choices of what and how to teach. I watched dancer-in-residence, Diana Lim of Seattle<sup>6</sup>. Her conceptualization of content was broad and detailed<sup>7</sup>. She decided, for example, whether to treat vertical extension the same as horizontal. She treated meanings in moves as different from the moves themselves. She treated mood as a special learning. Many of her distinctions were not verbalized. I realized some of them by listening to her coaching. Dance and other arts educators have been less compulsive than math educators in formally classifying their teaching acts but a full inventory of what ordinary teachers in either field do extends the curriculum guide with additional subclassifications and stretches individual cells of the matrix with content well beyond chapter headings, lists of objectives, and item pools.

The teacher's inventory of what needs to be taught and the student responses worthy of attention constitute a *knowledge-perception* of the aims of fine arts education. An *abilities-perception* is represented by the state goal statements of Figure 1 or by chapter headings in many a textbook. Let us consider (in Figure 2) the topics included in a well developed eighth grade music textbook:

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Figure 2. *Holt Music, Grade 8*

by Eunice Boardman Meske, Barbara Andress, Mary P. Pautz & Fred Willman Holt Reinhart and Winston, 1988.

- Chapter 1. The Many Roles of Musicianship
  - Chapter 2. Planning and Producing a Musical Event
  - Chapter 3. Listening to Music
  - Chapter 4. Music and Drama
  - Chapter 5. The Musician Sings
  - Chapter 6. The Musician Performs: Guitar
  - Chapter 7. The Musician Performs: Percussion
  - Chapter 8. The Musician Performs: Dulcimer
  - Chapter 9. The Musician Composes, Improvises and Arranges
  - Chapter 10. The Choral Sound
- 

The chapters are described in the Teachers Edition as oriented to: Expression, Harmony, Rhythm, Texture, Time and Place, Evaluation, Timbre, Melody, Form, and Articulation. These titles and emphases provide a nice umbrella under which student and teacher activities are fitted.

<sup>6</sup> I described my observation of Lim in Stake, Bresler and Mabry, 1991.

<sup>7</sup> In speaking of a vast and detailed content that dance instructors bring to the studio, I do not mean to say that as a group they put content learning higher than other learning. Clearly, instructors differ. My own acquaintance with arts teachers is nicely reflected in the work of sociologist Robert Connell (1985) who found teachers of all content areas preferring one of four emphases: intellectual growth, personal development, skill learning, and honoring custom. Those holding intellect in highest esteem take special pains in choosing content to teach but, whether articulated or not and whether sophisticated or not, all teachers have elaborate conceptualizations of subject matter.

Knowledge-perception starts within each of these, identifying then the subclassifications of singing and expression and harmony that the music teacher considers important parts of learning.

Let's take an example from theatre. Figure 3 is my impressionistic representation of choices for the drama teacher as to what to emphasize tomorrow prior to play practice. She decides to work on the concept of *self*, a concept underlined in the district curriculum guide. The guide is not explicit as to what the concept is but the teacher knows what he wants to help the students understand. An inventory here looking something like a moonscape is labeled Topography A at the bottom of the page with knowledge about *self* shown as pile B. The teacher considers the origins, facts, relationships, and applications of the concept of *self* in acting. What appears to be an enlarged pile B is the collection of knowledge elements the teacher feels pertinent. Some are already well known by the children and others are too complex or abstract. She of course chooses elements most relevant for these particular sixth graders. The knowledge elements originate in various disciplines and studies, represented here by circles C, D and E. Cylinder G represents the content the teacher decides in advance or spontaneously to present to the students. When it happens, ideas are modified as the conversations (Ashton-Warner, 1967; Aoki, 1983) and story telling (Egan, 1991) of instruction occur--shaped, of course, by the teachers' never-ending evaluative monitoring of the exchange.

The naiveté of Figure 3 is obvious. Representing knowledge as chips or building blocks is misleading. Graphic technology to represent pedagogy and epistemology, alas, is not highly developed.<sup>8</sup> Classification systems and content-skill grids are common in curriculum offices but there are few devices to represent conceptual links between topics and to guide pedagogical moves from one content to another. Yet, just as ancient travelers reached destinations before there were maps; just as people sang before there were scores; teachers teach without maps, build without blueprints. Intuitively, good teachers merge topical themes, capitalize on personal experience, draw out and reinforce the youngster's increasingly sophisticated touch. The aims of education include the acquisition of minutely detailed knowledge of the arts, summarized by such umbrella statements as the Illinois Goals or textbook chapter headings, but not *indicated* by those statements. Operational representation of purpose begs for differentiation among the countless learnings which could be included under the umbrellas. Teaching practice provides that differentiation and constitutes the most complete representation of purpose we have.

**Psychometric perception of arts achievement.** The concept of artistic talent or ability is not exclusive to testing, of course, but it essentially is the psychometrician's only concept of arts achievement. The tests are based on the realization that talent cannot be merely a potential. It is a manifestation of coordination or rendering, an accomplishment promising further accomplishment, but indication of some general skill. It is sometimes recognized or confirmed by a tryout or portfolio, sometimes by performance on an aptitude test. The concept of artistic ability is more or less generic, lacking direct reference to an inventory of behavior or understanding. Ignoring content, the construct, *arts ability*, is useful as indication--relative to other learners--of how much learning time or teaching effort will be required in subsequent instruction. Relative standings remain quite stable for a fixed group of students, stable usually even as individuals pass from one group into comparable groups.

Representation of the aims of fine arts education is confounded by these contending perceptions of student achievement. As indicated here, teachers in the classroom and specialists developing assessments to drive the evaluation are not looking at achievement through the same

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<sup>8</sup> Some of the best works to date: Rosalind Driver, 1973; Bob Gowin, 1990; D. H. Jonassen, 1982; Takahiro Sato, 1991. These works analyze either instruction, epistemology or cognitive development; they do not adapt nicely to the "conversational" exchanges of the American classroom.

### KNOWLEDGE DOMAINS

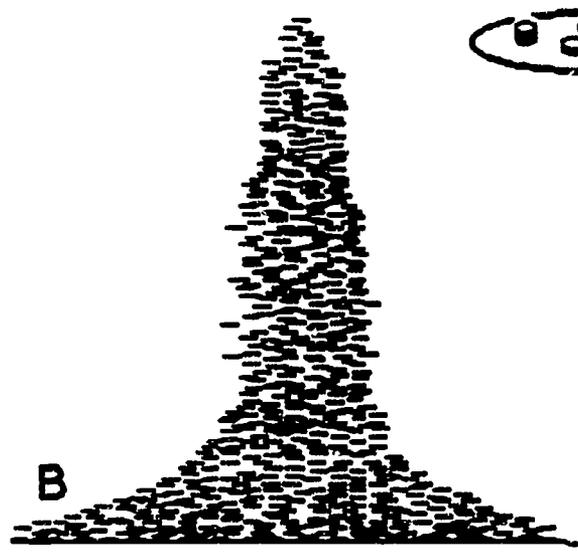
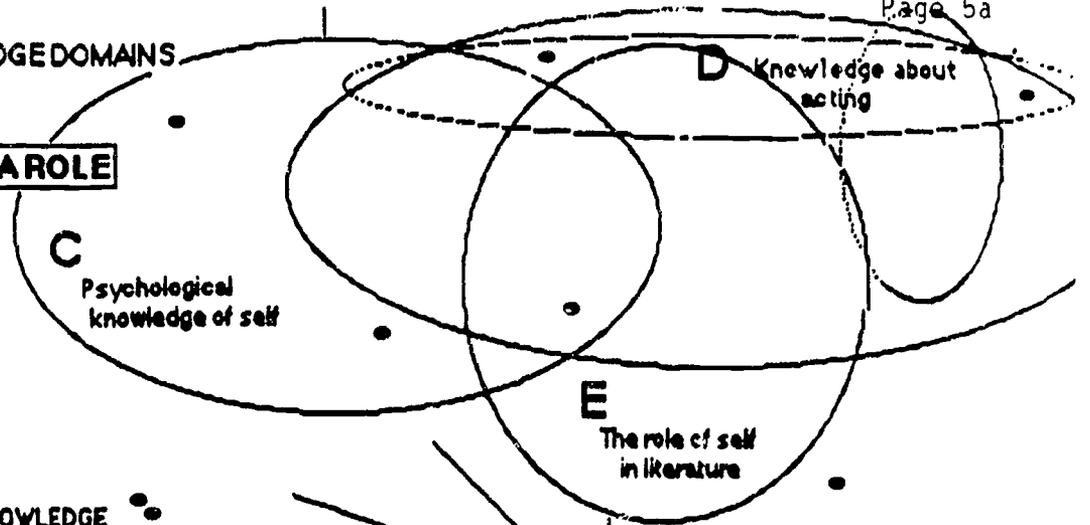
Figure 3.  
Theatre Topics to be Taught:

## KNOWLEDGE OF SELF IN A ROLE

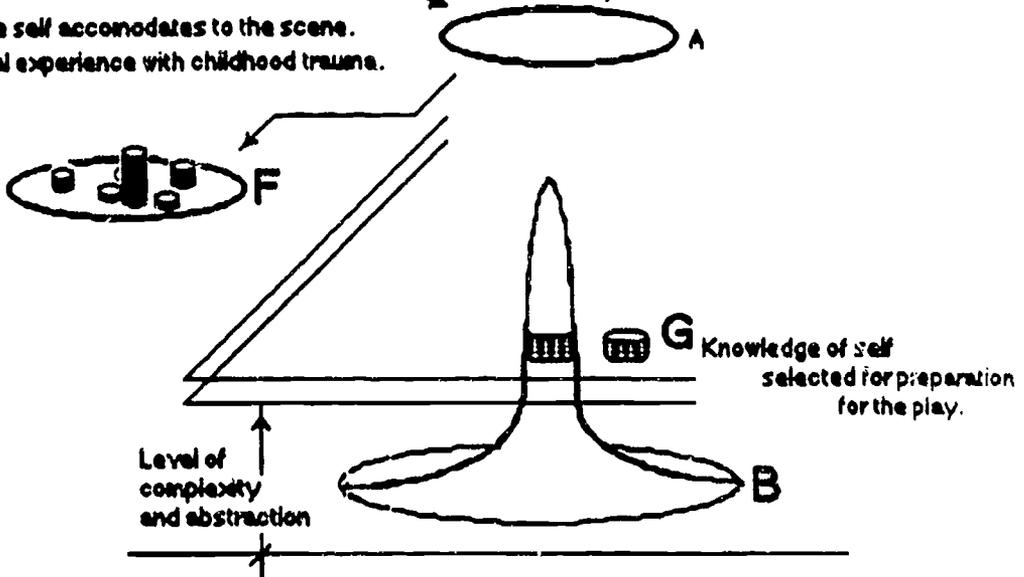
- Psychological knowledge of self**  
 Personality  
 Range of normality  
 Situational response  
 Mental health
- History**  
 Charismatics  
 Role of self in literature  
 Self vs. other
- Knowledge of acting**  
 Relation to audience  
 Projection

### KNOWLEDGE ELEMENTS

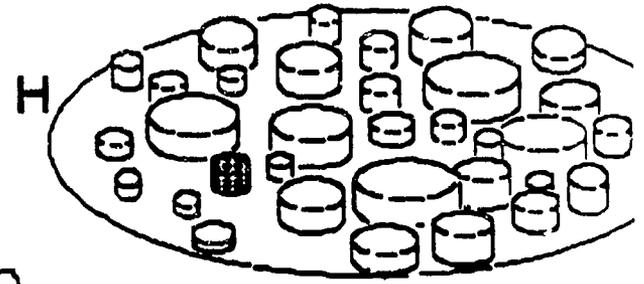
- ▣ Acting in proportion to which the self accomodates to the scene.
- ▣ Awareness of the role's personal experience with childhood trauma.



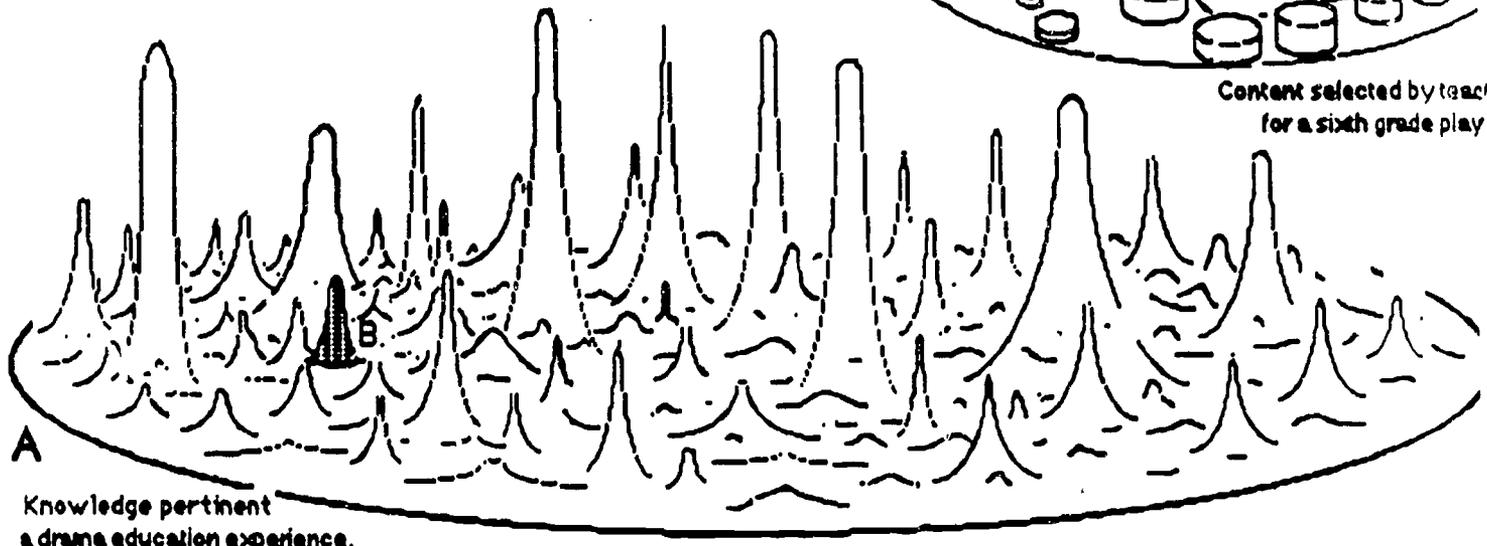
**B**  
A distribution of knowledge elements about the concept of self in a theatrical role.



Level of complexity and abstraction



**H**  
Content selected by teacher for a sixth grade play



**A**  
Knowledge pertinent a drama education experience.

eyes. Even when they agree on educational goals, their definitions of achievement are different. Noting widespread consensual setting of goal statements and syllabi for state and district educational reform, it has appeared that curriculum coordinators and committees agree on objectives and test items to represent accomplishment of a common subject matter. But, even though many participants in that process have been teachers, those perceptions of student accomplishment are often not the ones directing teaching in the classroom. Comprehensive research studies are needed to aid our acquaintance with the differences between pedagogical and psychometric perceptions of achievement.<sup>9</sup>

*The difference is essentially between seeing fine arts achievement as an attained ability versus seeing it as command of an itemized inventory of knowledge, technique, and sensitivity. As we know them, standardized tests measure abilities.* Tests are admired because the abilities are recognizable by experts and lay persons and because their scores can be shown not to be situation specific. The tests are widely taken to be valid.<sup>10</sup> The validity of using testing for representing the aims of education, however, depends on what achievement is interpreted to be.

For any particular use of a standardized achievement test, validity of the measurement indicates the quality of information conveyed about how well the students are achieving--for a lifetime--so far, for the year, or even for the week. The key distinction of this paper is between instructional aims based on a generic, single-dimension concept of achievement--a view promoted by test specialists--and aims based on a complex, experiential conceptualization of achievement detailing the many steps, the many differentiations, of content and skill--a view held by teachers. *These views are so different that the panorama of achievement which arts teachers regularly aspire to cannot be represented with validity with the type of standardized achievement test in use today.*

**The choice.** All education and certainly schoolwork in the fine arts face an important choicepoint--whether to work toward standardization or differentiation in the conceptualization of instructional purpose. Standardization enhances a uniform perception of purpose and management of teaching. Differentiation enhances the role of the teacher as organizer and interpreter of study. It is more than a matter of locus of control, it is a matter of epistemology. The present efforts at national reform and school improvement are toward standardization, which means that the same knowledge and school experience is urged for all. Custom continues to support a relatively autonomous teacher, intuitively adapting knowledge acquisition to the circumstances, including the uniqueness of each child. What the goal statements, test scores, and teachers say is relatively unimportant, what the teachers do determines the direction and worth of the fine arts program.

With or without intention, with or without explication, an arts teacher works simultaneously on different aims. Yet not all aims are served well. The training of teachers, the prescription of goals, the needs of students do not adequately shape the choice of aims to be emphasized.

<sup>9</sup> I have made a similar argument about perceptions of mathematics achievement in a paper entitled "Pedagogic and Psychometric Perceptions of Mathematics Achievement," in press.

<sup>10</sup> In the eyes of experts, however, tests themselves are neither valid nor invalid. It is the interpretations of test scores in particular situations that can be said to be valid or invalid (Cronbach, 1980; Jaeger and Tittle, 1980; Messick, 1989).

## Bibliography

- Ted Aoki, 1983. Curriculum implementation as instrumental action and as situational praxis. In Ted Aoki and others, editors, *Understanding situational meanings of curriculum in-service acts: Implementing, consulting, inservicing. Curriculum Praxis Monograph Series, 98*. Edmonton, University of Alberta.
- Sylvia Ashton-Warner, 1967. *Teacher*. New York: Bantam.
- Harry Broudy, 1977. *The whys and hows of aesthetic education*. St. Louis: CEMREL.
- Harry Broudy, 1990. The role of music in general education. *Bulletin of the Council for Research in Music Education, 105*, 23-43.
- Laura Chapman, 1985. *Discover art*. Worcester, MA: Davis Publications.
- Robert Connell, 1985. *Teachers' work*. Sydney: George Allen and Unwin.
- Lee Cronbach, 1980. Validity on parole: How can we go straight? *New directions for testing and measurement--Measuring achievement over decade*. Proceedings of the 1979 ETS Invitational Conference, pp 98-108. San Fransisco: Jossey-Bass.
- Michael Day, Elliot Eisner, Robert Stake, Brent Wilson & Marjorie Wilson, 1984. *Art history, art criticism, and art production: An examination of art education inselected school districts. Volume II: Case studies of seven selected sites*. Rand Corporation.
- Rosalind Driver, 1973. "The representation of conceptual frameworks in young adolescent science students" University of Illinois dissertation.
- Arthur Efland, 1979. *Planning art education in the middle/secondary schools of Ohio*. Columbus: State Department of Education.
- Kieran Egan, 1989. *Teaching as story telling*. University of Chicago Press.
- Elliot W. Eisner, 1969. Instructional and expressive educational objectives: Their foundation and use in curriculum. In Robert E. Stake, editor, *Perspectives of curriculum evaluation*, Number 3. Chicago: Rand McNally.
- Elliot W. Eisner, 1982. *Cognition and curriculum*. New York: Longman.
- Howard Gardner, 1982. *Art, mind, and brain*.
- Bob Gowin, 1990. Epistemic elements in evaluation research. *Studies in Educational Evaluation, 16*, 319-333.
- Jerome Hausman, 1963. Research on teaching the visual arts. In Nate Gage, editor, *Handbook of research on teaching*. Rand McNally.
- Illinois State Board of Education, 1986. *Assessment handbook*. The Board, 100 North First Street, Springfield.
- Richard M. Jaeger & Carol Kehr Tittle, editors, 1980. *Minimum competency achievement testing*. McCutchan.
- D. H. Jonassen, editor, 1982. *The technology of text*. Engelwood Cliffs: Educational Technology Publications.
- Samuel Messick, 1989. Validity. In Robert Linn, editor, *Educational Measurement*, 3rd edition. Macmillan.
- Michael Polyani, 1958. *Personal knowledge*. University of Chicago Press.
- Takahiro Sato, 1991. "Development of instructional materials in NEC Technical College: Concepts and practices." Tokyo: NEC Corporation.
- Ralph A. Smith, 1990. Cultural literacy and arts education. *Journal of Aesthetic Education, Spring, 1990*.
- Robert Stake, Liora Bresler & Linda Mabry, 1991. *Custom and cherishing: The arts in elementary schools*. Urbana: University of Illinois, Music Educators National Conference.
- Robert Stake, Robin McTaggart, & Marilyn Munski. An Illinois pair: A case study of school art in Champaign and Decatur. In Michael Day, et al., *Art history, art criticism, and art production. Volume II: Case studies of seven selected sites*. Rand Corporation.