"We need a curriculum for children that does justice to the scope of their minds and we need evaluation practices that do justice to the lives that students and teachers lead in classrooms. Even though the current educational climate adumbrates another image, I believe we are at the threshold of realizing these newfound aspirations for education. Someday I believe that we will see school curricula that make wide forms of knowing possible and modes of evaluation that can capture the richness of their consequences."

This article addresses itself to a problem that is receiving little attention today, the demise of the balanced curriculum. Amidst the demands for a return to the educational virtues of the past, curricular balance seems to be an abandoned idea, a romantic notion, appropriate perhaps during an era of greater educational latitude, but not particularly appropriate for today's educational world.

The Unbalanced Curriculum

My thesis is simple and straightforward. I believe the current emphasis on the production of measurable competencies in the three Rs is creating an unbalanced curriculum that will, in the long run, weaken rather than strengthen the quality of children's education. This paper aims to provide the grounds for this belief and to lay a foundation upon which a balanced curriculum can be built.

If one reviews the research that has been done on methods of teaching, on forms of grouping students, and on teacher personality and their effects, one will find that one of the most important variables that has been discovered that influences what students learn in school is what students are given an opportunity to learn.¹ ² This


mind-shattering generalization (long known by anyone free from the blinders of much professional socialization) has profound implications for curriculum decision-making. From it one can infer that one of the most important curriculum decisions that can be made is deciding what to teach. Content inclusion and content exclusion decisions define the parameters within which a great deal of what students learn is to be found.

Decisions about what the curriculum shall consist of with respect to content are important, not only because such decisions define the opportunities students will have for learning that content, but because they also define for students what is regarded as important in school.

Time is one of our most precious resources. Once it is used, it is gone, never to return again. It is, in this sense, a limited and exhaustible commodity. Thus, what we choose to "spend" time on says something about what we value. Decisions about curriculum content and the amount of time devoted to given content areas therefore not only influence the opportunities children have to learn, they also influence what children perceive to be of value in the school and in the culture-at-large.

If one wanted to secure an operational definition of what is valued in school, one could do little better than to calculate the amount of instructional time devoted to the teaching of content areas within the curriculum. If this calculation is made, it will become quickly apparent that some areas receive a great deal more attention than others. For example, at the elementary level about 60-70 percent of all formal teaching is devoted to the language arts and arithmetic. If we calculate the amount of time devoted to, say, music or art, it turns out that about three percent of school time each week is devoted to these fields. On the average, art and music are taught about one half-hour to about one hour per week. Thus, children spend more time at recess than they do studying either art or music in the schools.

I use art and music only as examples. The social studies, the sciences, field trips, and other activities in content areas once believed important for children are also casualties of current educational priorities. Increasingly, more and more teachers are having less and less time to devote to the social studies, to science, or to drama, to take field trips and the like.

Although the amount of time devoted to different content areas is a powerful index of what we value in schools, the amount of time devoted to various fields of study is not the only cue that teaches youngsters what is valued. Consider, for example, the location of time. When a subject is taught also says something about what is important. Art and music are taught in the afternoon, not in the morning. In the morning, children need to think, thus reading and arithmetic are taught in this part of the day. When youngsters do not have to think, or when they do not have to think as clearly, the "noncognitive" fields can be attended to. Thus, mornings are for cognition and afternoons for affect.

Consider further which afternoons the arts are taught. Very often they are taught on Thursday, or, more likely, on Friday. Again, the point here is not specific to art or music, but rather
to the means through which the use of time teaches children what schools value. The amount of time and the location of time are two such means.

Well, what does this all have to do with balance in the curriculum? What is the relationship between time spent and children's opportunities to learn? In the simplest terms, it is not possible to have any semblance of curriculum balance whatsoever if the content areas needed for such balance are absent from the curriculum or given so little time that their effectiveness is neutralized. If one of the most significant factors influencing learning in school is the opportunity to learn, then the lack of opportunity to deal with particular content fields vitiates the child's opportunity to learn what those fields have to provide. A decision to teach X in a program that has time constraints is also a decision not to teach Y. Current pressures upon teachers, supervisors, and school administrators are leading to an ill-conceived use of school time that may have short-term gains, but will have, I believe, long-term costs. It is to the grounds for curriculum balance and the costs of its neglect to which I now turn.

Symbol Systems and Modes of Consciousness

Human beings possess the capacity to contact and construe reality in a variety of ways. The sensory and symbol systems that humans have invented to express what they have come to know create different forms of awareness and make different modes of understanding possible. With our sensory systems, we experience various aspects of a multidimensional reality. This is what I mean. Consider autumn. Recollect what it means. Conjure up an image of its features. Autumn for some is the last three months of the Julian calendar. For others, it is the period in the second half of the year when light and darkness are of equal proportion. Autumn for others still is the end of summer, and for teachers, autumn is the psychological start of a new year.

But autumn can also mean the crunch of leaves as you trample through a favorite forest. It might mean the crackle and snap of burning branches, or their special aroma wafting from the flames. For some, autumn might mean the blaze of orange, yellow, and light green leaves that stand crisply against a clear and bright blue sky. For others, autumn is a special feel to the breeze, a kind of soft chill that heralds the coming of winter. Which one is the real autumn? Autumn is not one thing, it is many. We have the capacity to know autumn in the various ways in which it can be known, and we have the ability to conceptualize, to conjure in the mind's eye images of sound, sight, smell, and touch to help us recall the ways in which autumn is known to us.

Now the ability to use these sensory systems is to some degree an automatic consequence of maturation. Humans are born with the capacity to see and to hear, to taste and to feel, but the development of these capacities to a point beyond their uses for survival is a cultural achieve-
ment. We do not, simply as a result of matura-
tion, develop highly refined forms of intelligence
in their use. The ability to see what is subtle, to
taste what is delicate, to hear what is muted, and
to feel what is fleeting, is a result of learning.
Culture provides for the development of some of
these abilities, but neglects others.4

The cultivation of sensory systems requires
the development of intelligence in those modes
of perception in which the systems function. But
the ability to transform what those systems pro-
vide into a public form requires an ability to use
the symbol systems that pervade the culture.5
Each symbol system—mathematics, the sciences,
art, music, literature, poetry, and the like—func-
tions as a means for both the conceptualization
of ideas about aspects of reality and as a means
for conveying what one knows to others. Each
symbol system has unique capabilities. Each sym-
bol system sets parameters upon what can be
conceived and what can be expressed. Thus,
through writing we are able to know autumn
in ways that only the visual arts make possible.
Through poetry we can know autumn in ways
that only poems can provide. Through botany
we are able to know autumn in ways that only
botanists can convey. How autumn is conceived
and, hence, what we know about it depends upon
the symbol systems we use or choose to use.

Are some symbol systems better than oth-
ers? Are some more rigorous or more precise?
What do different symbol systems do that others
do not? What are the particular strengths and
weaknesses that different symbol systems have
for portraying or communicating aspects of real-
ity? Consider for example the sense of life we
call "suspense." To most adults the meaning of
the word suspense is not particularly obscure.
If it used in a sentence, it is likely to be under-
stood. Now suppose that someone wanted to con-
vey that sense of life called suspense, not by
words, but by music. We can readily imagine
what the music might be like, and we have little
difficulty recognizing that suspense can be ex-
pressed in music as well as in discursive lan-
guage; people who listen to music can experience
that quality of life we call suspense if the com-
poser and the musician are competent to write
and to play it.

Compare this scenario with a situation in
which suspense is to be created through sculp-
ture. Here the problems become formidable. It
becomes difficult even to conceive of the ways in
which such a concept might be conveyed through
sculpture, a symbol system that is spatial rather
than temporal. Suspense is a temporal pheno-
non as are music and language. These symbol
systems lend themselves better to the expression
of what is a temporal experience than a symbol
system that is spatial.6

Consider another example. Suppose for a
moment that you were moving to another part
of the country and that you asked a friend to
look around for an apartment for you. Your
friend writes back and says that he or she has
found an apartment, but that it will need new
carpeting since the existing carpeting is badly
worn. What kind of additional information would
you want from your friend? More than likely you
would want to know how much carpeting is
needed, and, for that kind of knowledge, the
appropriate symbol system is arithmetic. If you
wanted to know how much carpeting is needed,
you would not want a picture of the living room,
you would want a set of numbers. But, if you
wanted to know what the living room looked
like, you would not want a set of numbers, you
would want a set of pictures. A particular sym-
bol system is useful for some types of informa-
tion, but not for others, and vice versa. Thus,
when we choose to become "literate" in the use
of particular symbol systems, we also begin to
define for ourselves what we are capable of con-
ceiving and how we can convey what we have
conceived to others.

Learning To Write Means Learning To See

The relationship between a symbol system
as a mode of conception and its public manifesta-
tion in, say, mathematics, literature, or art is not
simply a one-way street. That is, it is not simply

4 Elliot W. Eisner. "What Do Children Learn When
They Paint." Art Education (in press).

5 The discussion of symbol systems has been in-
formed by my colleagues Richard Snow of the Stanford
School of Education and Gavriel Solomon of Hebrew
University, Jerusalem.

6 This example is taken from a lecture by Rudolph
Arnheim, delivered at Stanford University in March 1977.
the case that the mode in which conceptualization takes place is the form in which expression must occur. Put another way, because I am able to visualize certain features of a reality does not mean that that reality must be symbolized visually. One can conceptualize in one mode and express in another. In this sense, there is a rich and productive interaction between modes of conceptualization (which, incidentally, are themselves symbolic since all aspects of reality are abstracted for conception) and the form one chooses to use to publicly render what one has conceptualized. Perhaps the most vivid example of this is to be found in literature. Consider the following passage from Annie Dillard's book Pilgrim at Tinker Creek:

The shadow's the thing. Outside shadows are blue, I read, because they are lighted by the blue sky and not the yellow sun. Their blueness bespeaks infinitesimal particles scattered down inestimable distance. Muslims, whose religion bans representational art as idolatrous, don't observe the rule strictly; but they do forbid sculpture, because it casts a shadow. So shadows define the real. If I no longer see shadows as "dark marks," as do the newly sighted, then I see them as making some sort of sense of the light. They give the light distance; they put it in its place. They inform my eyes of my location here, here O Israel, here in the world's flawed sculpture, here in the flickering shade of the nothingness between me and the light.

Now that shadow has dissolved the heavens' blue dome, I can see Andromeda again; I stand pressed to the window, rapt and shrunk in the galaxy's chill glare. "Nostalgia of the Infinite," Chirico; cast shadows stream across the sunlit courtyard, gouging canyons. There is a sense in which shadows are actually cast, hurled with a power, cast as Ishmael was cast, out, with a flinging force. This is the blue strip running through creation, the icy roadside stream on whose banks the mantis mates, in whose unweighted waters the giant water bug sips frogs. Shadow Creek is the blue subterranean stream that chills Carvin's Creek and Tinker Creek; it cuts like ice under the ribs of the mountains, Tinker and Dead Man. Shadow Creek storms through limestone vaults under forests, or surfaces anywhere, damp, on the underside of a leaf. I wring it from rocks; it seeps into my cup. Chasms open at the glance of an eye; the ground parts like a wind-rent cloud over stars. Shadow Creek: on my last walk to the mailbox I may find myself knee-deep in its sucking, frigid pools. I must either wear rubber boots, or dance to keep warm.

What is perfectly apparent from this passage is that Annie Dillard had to be able to see in order to write. She had to be able to visualize, to form concepts of the reality to which she previously had attended. Out of this ability developed the experiential content for her literature. What made her book possible was not so-called "writing skills," it surely wasn't the rote application of the rules of grammar or punctuation, it was first the capacity to see, second the ability to conceptualize what had been seen, and third, the ability to transform those conceptions into a form that rendered them vivid. Her eyes, which are a part of the mind, provided the content that made her writing possible.9

But the influence does not stop there. What Annie Dillard has given us is literature, but what her literature helps us do is to see. Once having read her book, we can never see a creek or a shadow in quite the same way as we once did. Her writing becomes a means for guiding our attention by making vivid what was previously ignored. Thus, Annie Dillard's eyes make her literature possible, and her literature gives vision to our eyes. The circle is completed.

This relationship between seeing and writing, and writing and seeing holds, a fortiori, in all of the modes through which human conception and expression occur. The concepts we learn in mathematics facilitate forms of cognition that can have their expression in music. Pythagoras is perhaps the most stunning example. What we are able to understand through poetry can contribute to the creation of penetrating theory in the social sciences. The mind draws upon a variety of forms of knowing to give birth to ideas and these ideas, I am arguing, need not be expressed in the modes within which the conceptualization has occurred. Consider what Einstein had to say about the role of visualization in his own work in mathematics.

The words or the language, as they are written or spoken, do not seem to play any role in my mechanism of thought. The psychical entities which seem to serve as elements in thought are certain signs

---

8 Ibid., pp. 62-63.
and more or less clear images which can be “volun-
tarily” reproduced or combined. . . . But taken from a
psychological viewpoint, this combinatory play seems
to be the essential feature in productive thought—
before there is any connection with logical construc-
tion in words or other kinds of signs which can be
communicated to others. The above-mentioned ele-
ments are, in my case, of visual and some of muscular
type. Conventional words or other signs have to be
sought for laboriously only in a secondary stage,
when the mentioned associative play is sufficiently
established and can be reproduced at will.10

Einstein was, of course, a genius. But the
processes he identified are not unique to geniuses.

What does all of this mean for a rationale
for curriculum? Simply this, if the ability to use
symbol systems for purposes of conceptualiza-
tion and expression are, at least in part, a result
of cultivation, then it would seem to follow that
programs that deny students opportunities to
learn to use such systems of thought and expres-
sion deprive them of the kinds of meaning that
they can learn to create.

Put in terms of a value statement, we can
now state: If education has as one of its major
aims the development of each child’s ability to
create meaning from experience, and if the con-
struction of meaning requires the use of skills
applied within a symbol system, then the absence
of such systems within the curriculum is an im-
poverishment of the quality of education children
receive.

Viewed from this perspective, balance in the
curriculum is not simply a plea for the equal repre-
sentation of cultural artifacts, but rather an imper-
ative for helping students learn how to expand
their modes of consciousness. Balance in the cur-
rriculum in this view is a conception rooted in an
understanding of the nature and scope of cogni-
tion. It is not the case that certain cultural forms,
such as the arts, to name but one example, are
affective and mathematics cognitive. It is the case
that each of the major cultural forms we call the
arts and the sciences, the social studies and the
humanities are symbol systems that humans use
in order to know. They are all cognitive. Sym-

do forms that one must learn to “read” if meaning
is to be secured. A school curriculum that neg-
lects attention to these publicly coded symbolic
forms diminishes the child’s opportunities to
think in the modes these forms make possible.
Such a curriculum restricts the child’s opportu-

nity to refine incipient skills of visual perception.
It diminishes the child’s chances to employ the
modes of imagination that poetry and drama can

gender. It withholds from the children the oppor-
tunity to cultivate their capacities to hear what
is subtle. These forms of educational deprivation
exact a price, I have argued, not only in those
spheres of human activity in which the skills
function directly, but also in those other spheres
in which sensitivity to the visual world, to the
auditory, and to the imaginative are crucial. Cog-
nitive forms of deprivation cannot be isolated to
a compartmentalized conception of mind that
often serves as a convenient but misleading fic-
tion for justifying an impoverished view of edu-
cation. The mind is of a piece.

At present, the development of the forms of
consciousness that a balanced curriculum makes
possible is not a high priority in American school-
ing. The public has been told that children no
longer read as well as they once did, that they
have difficulty spelling, that their writing skills
are less than what they ought to be. We have
developed and used various kinds of tests to pro-
vide “scientific” evidence of the decline in stu-
dents’ ability, and the public now expects these
matters to be remedied. For classrooms through-
out the nation, this has resulted in a return to the
so-called basics and to a neglect of other forms of
understanding that a balanced curriculum repre-
sents. Even university professors of education
who ought to know better use extraordinarily
limited data to support beliefs about educational
decline and suggest or imply that the appropriate
remedy is to do more of the same. In short, we
have coped with the pressures put upon the
schools by looking for short-term gains in the
“basics” at a cost of neglecting what tests like the
California Test of Basic Skills do not measure.

It is not likely, in my view, that devoting more
time to what now already consumes 60 to 70 per-

10 Gerald Holton, “Influences on Einstein’s Early
Work in Relativity Theory,” The American Scholar
37(1); Winter 1967-1968.
Balance in the curriculum is not simply a plea for the equal representation of cultural artifacts, but rather an imperative for helping students learn how to expand their modes of consciousness.

Balance in the curriculum is needed to help children learn to experience the world widely, so too must be the approaches we use to evaluate. One symbol system cannot provide the richness of view that we need. Ironically, the aspiration to provide an unbiased, objective description of what students learn and how teachers teach by measuring the extent to which objectives have been reached and by counting the moves or utterances teachers make in the classroom often distorts the very reality such procedures aim to describe. The limited perspective our present methods of evaluation employ too frequently leads us to accept the part for the whole.

A balanced curriculum needs to be comple-
mented by a balanced approach to evaluation. To do the latter will require a radically new basis for work in this field. This new work will require a model of inquiry that includes not only scientific premises and procedures, but artistic ones as well. It will be qualitative as well as quantitative. We need first of all to visit classrooms and observe with a sensitive and informed eye what the processes are that occur in such settings. We need, in my view, to see at least as much as we need to count. We need, I believe, to develop what I have called educational connoisseurship,\(^{11}\) an art that is concerned essentially with the appreciation of what one attends to. In the arts, connoisseurship has a long tradition. Those who appreciate music, the visual arts, theatre, ballet, and those who have taken the time, expended the energy, and who have learned to appreciate the important subtleties of these art forms have developed high degrees of connoisseurship. We need the analogue to this mode in the appreciation of classroom life.

To some extent we already have educational connoisseurs in each school. I am speaking here of teachers. I would like one day to see schools in which teachers can function as professional colleagues, where a part of their professional role was to visit the classrooms of their colleagues, and to observe and share with them in a supportive, informed, and useful way what they have seen. Less professional isolation and more professional communication might go a long way to help all teachers secure more distance and hence to better understand their own teaching.

But to share what one has seen requires the ability to communicate in a way that does justice to the qualities observed. This process is one of criticism, but not criticism in a negative sense; rather, criticism in the sense in which it is used in literature, film, and the arts. I have called this form of criticism, educational criticism. The end of criticism, wrote Dewey, is the reeducation of perception.\(^{12}\) The critic's function is to serve as a midwife to perception. The educational critic provides a description, interpretation, and evaluation of the classrooms he or she has seen, and through that process raises the level of awareness that a teacher can secure. Simply knowing the final score of the game after it is over is not very useful. What we need is a vivid rendering of how that game is being played. Educational connoisseurs who can function as educational critics can render that process and make it vivid. At Stanford, seven doctoral dissertations have been completed that do just that.\(^{13}\)

We also need to use symbol systems that are employed in film, that use teacher logs and student interviews, and that employ graphic visual analysis of the work students create. We need slides of classroom activity and photos of work in progress. In short, we need to use an approach to educational evaluation that capitalizes on our human capacity to come to know reality in its multidimensional richness. The reduction of this richness to a single symbol system is an impoverishment of our ability to understand its multiple features. I am happy to say that the foundations for the work I have just described are well underway. Such work is being done not only in the United States, but in England and in Europe. I speak here of the work of Phillip Jackson of the University of Chicago, whose book Life in Classrooms\(^{14}\) did so much to demonstrate the power of critical description. I speak of the work of Robert Stake at the University of Illinois, whose "respon-


sive evaluation"\textsuperscript{15} advocates the use of a wide variety of data and methods for evaluating educational practice. I speak of the work of Parlett and Hamilton in England and their concern with "illuminative evaluation,"\textsuperscript{16} and the work of Hamilton, Jenkins, King, McDonald, and Parlett represented in their recent book, \textit{Beyond the Numbers Game},\textsuperscript{17} a book, like George Willis' new book, \textit{Qualitative Evaluation},\textsuperscript{18} that emphasizes nonconventional approaches to evaluation. And I speak of Fred Erickson's educational ethnographic work at Harvard that attempts to describe in fine detail what happens in classrooms.\textsuperscript{19} These scholars are swimming against the current tide, but, nevertheless, contributing to the development of an approach to evaluation that will complement the conventional forms of evaluation that have dominated our thinking since the turn of the century.

In the long run, we need a curriculum for children that does justice to the scope of their minds, and we need evaluation practices that do justice to the lives that students and teachers lead in classrooms. Even though the current educational climate adumbrates another image, I believe we are at the threshold of realizing these newfound aspirations for education. Someday I believe we will see school curricula that make wide forms of knowing possible and modes of evaluation that can capture the richness of their consequences. When that day arrives, educational inquiry as it occurs in teaching, evaluation, and research, will be recognized as both art and science, and the appreciation of Man's capacity to understand will provide the grounds for what we teach and how we come to know our achievements.\textsuperscript{27}


Elliot W. Eisner is Professor of Education and Art, School of Education, Stanford University, Stanford, California.

---

**Future ASCD Annual Conferences**

<table>
<thead>
<tr>
<th>Year</th>
<th>Date</th>
<th>Location</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>March 3-7</td>
<td>Detroit</td>
<td>Cobo Hall</td>
</tr>
<tr>
<td>1980</td>
<td>March 29-April 2</td>
<td>Atlanta</td>
<td>Georgia World Congress Center</td>
</tr>
<tr>
<td>1981</td>
<td>March 7-11</td>
<td>St. Louis</td>
<td>Congress Center</td>
</tr>
<tr>
<td>1982</td>
<td>March 20-24</td>
<td>Anaheim</td>
<td>Convention Center</td>
</tr>
</tbody>
</table>

---

\textit{MAY 1978}