To prevent the move to make schools more humane from developing into another educational fad, the author proposes an approach to curriculum design and evaluation that explicitly relates the human condition to the necessary goals of teaching. To do this, he has prepared a grid in which the six elements of the human condition from developmental psychology intersect with the four elements of the operational goals. The operational goals of teaching are defined as fluency, manipulation, confidence/value, and persistence. The psychological categories are intellectual, emotional, social, aesthetic, spiritual, and physical. The grid indicates that we have projected a monstrous version of the human condition by our failure to examine seriously 22 out of 24 elements that belong in comprehensive curriculum design and evaluation. We know little about the aesthetic, spiritual, and physical aspects of growth, and current evaluation schemes tend to leave out the areas of confidence/value and persistence. The grid can offer a kind of map for curriculum development for a humane school. (MBM)
The eloquent writing of the past few years on the theme of the humane school could result in yet another educational fad, with its accompanying rituals, jargon, and ultimate disillusionment. This theme, especially, invites pompous nonsense, and we have already heard enough.

Let's hope it won't happen. That the schools are in many ways inhumane is easy to demonstrate. The idea that they need not be is one of the most inviting now on our minds. To avoid another disillusioning fad, we need to begin the process of turning our big shambles of an institution into the kind of nurturing social tool we have always intended it to be. And to do this, we need tools.

One such tool is an approach to curriculum design and evaluation that explicitly relates the human condition to the necessary goals of teaching. The purpose of this paper is to offer such an approach for the consideration of the profession.

To begin, we have to cope somehow with the word, "humane." How shall it be understood? Socially? Theologically? Physically? Since the beginning of civilization, the classicists have asked "What is Man?" and their answers are spread before us in the history of ideas, in literature, in the arts. The question is so broad that it seems beyond us educationists; we wait for some agreement among the authorities, but we know it will never come. Under these circumstances, lest we merely wait, we have to nerve ourselves and make an answer of our own—one we can use until a better one appears. One source we have often used has been developmental psychology, which has served us well: it underlies the kindergarten and nursery school curriculum, which many of us feel has been our most successful attempt at curriculum design. It has nourished the growth of guidance programs.

Research in developmental psychology falls into recognizable categories. According to such research, man develops intellectually, emotionally, socially, aesthetically, spiritually, and physically. Most of the research we educationists are aware of lies in the first three categories, but there is good and useful work in the second three also. While the psychologists never intended it, they imply that man is an intellectual, emotional, social, aesthetic, spiritual and physical creature.
For our purposes, these categories have certain advantages. They do not grow from any particular philosophical or theological system, and need not conform to any particular set of limiting assumptions. They are open-ended and pragmatic. Most important, they define themselves empirically. Since what we try to do in schools is open-ended and pragmatic, and since we try to act according to what appears to happen instead of only in terms of what ought to happen, these categories may well serve to hold the term "humane" still for us long enough to carry on some work. Let's try them out here, at least in principle, and see what they yield. We'll come back to what they mean in a moment.

Before we do so, however, let us consider another set of categories, for in the interaction of the two sets we may find a helpful approach to curriculum design and evaluation.

**The Operational Goals of Teaching**

This second set of categories deals with the intentions teachers have that are independent of the subject matter they are working with at any given moment. We shall consider four: fluency, manipulation, confidence/value, and persistence.

**Fluency.** The goal of any teacher is that students become familiar with the symbol system, vocabulary, media, and the typical phenomena associated with the content he seeks to teach. Children have to be fluent with the skills of word recognition, or no reading occurs. They have to be used to the geographer's system of notation, or there will be no thinking about geography. And so on. Fluency does not necessarily precede everything else in teaching—it may grow through time and experience—but it is always a necessary operational teaching goal.

**Manipulation.** Teachers also seek to lead students to manipulate the data out of which content is made. Word recognition is not reading, even if Rudolf Flesch does not know the difference. To read is to draw understanding from a page to manipulate the symbol system in such a way as to interpret it. An art experience does not consist of becoming familiar with the various art media and their properties. It consists of manipulating them in such a way as to make an art object. And so on. The ability to manipulate the data, which we often call "understanding" is a universal teaching goal.

**Confidence/value.** Teachers also seek to instill confidence in students-confidence that they can manipulate the data on their own. At the same time, teachers hope students will value the ability they acquire. Not only do we want students to "do" math, we want them to be confident that they can do it, and to believe in its value to them. If we fail to produce this condition, students may (as many do) learn to "do" math, and at the same time learn to dislike it. When we are teaching the way we know how to, we build confidence and value by repeatedly putting students on their own in the content, while calling their attention to the satisfactions associated with being on their own. We make the whole affair rewarding.

**Persistence.** If a student is fluent, has learned to manipulate the content, and has developed confidence and value, then we hope he will persist in "doing" the content after formal instruction has stopped. We hope the student who has learned to think historically will continue to do so, and that the budding pianist will play for pleasure on his own, later. While our failures in this area are grievous, they are not universal. The attrition of budding pianists is shocking; so is the attrition of budding mathematicians. But many children who learn to read go on reading, and there is much evidence that lifelong persistence is kindled in school in science, the arts, athletics and other fields.
The Psychological Categories

Now let us reconsider the categories of developmental psychology mentioned earlier. Each of them must be understood in some operational manner, if they are to be used operationally—and that is our intent here.

**Intellectual.** Bloom's Taxonomy of Educational Objectives: Cognitive Domain serves as an elaboration of what this category includes. Most of us can claim a considerable acquaintance with it: we recognize the difference between Scheffler's "knowing that" and "knowing how"; we accept Bloom's "higher" and "lower" intellectual activities. For more than fifty years, educational literature and teacher education programs have stressed the importance of problem solving and critical thinking as attributes to be pursued in curriculum development. We need not elaborate on it here.

**Emotional.** The idea that there is an emotional life that is not merely a pollution of the intellectual life is of our century. Samuel Johnson's Dictionary (1755) defines passion merely as a disturbance of the reason; we know better. The emotional development of children and young people has been a major preoccupation of the researchers and observers in developmental psychology for more than two generations. For us educationists, it is a familiar domain, though still in need of extensive exploration.

**Social.** The social development of children and young people has not been researched as extensively as the intellectual and the emotional, but there is a considerable body of knowledge nevertheless. Social development deals with the social mechanisms children use in their dealings with one another, with their understanding of authority and external social structures, and with their view of the social self.

**Aesthetic.** The idea that there is such a thing as aesthetic development came to prominence much more recently than did the ideas of intellectual, emotional, and social development. There were pioneering studies of aesthetic development in the twenties and thirties, but the field has never attracted as much attention as the three most popular fields. In general, to borrow from Harry Broady, aesthetic development consists of increasingly finer discriminations in the sensuous, formal, technical, and expressive meanings of art objects, whether produced by oneself or others, and whether visual, tactile, dramatic, poetic, or kinesthetic. Aesthetic behavior is universal. Even the arrangement of a conventional classroom conforms to an aesthetic judgment of some kind, usually highly conventional and trite. People speak, dress, eat, conduct their love lives, and interact according to aesthetic judgments. Aesthetic development is part of the whole man.

**Spiritual.** By "spiritual" we refer to what man does about his awe. We are awestruck creatures: we can ask questions that cannot be answered intellectually, emotionally, socially, aesthetically, or physically—questions that require not an answer, but a confrontation and an acknowledgement. The meaning of human existence, the possibility of a conscience, the concept of infinity ("Where is the end of the sky?"); Job's questions, all are examples. Religious practices and forms help us confront and acknowledge such questions. The answers, or the responses to them exist for many of us as spiritual practice. All men are spiritual, even if not religious. One dare not deny this quality of what it is to be human.

**Physical.** The significance of the fact that we are physical beings has not been examined in nearly the depth the fact demands. Anyone who has worked with children has had to recognize the fact that they need to come to terms with their own bodies.
As they mature, their "body image" changes, and with it their view of themselves. Years ago, in a book called *Children's Social Values*, I reported that some children saw themselves as physical creatures, from the neck up. Others have made similar findings. But an adolescent clearly sees himself in a full-length mirror. We offer little or no help to children's sense of themselves as physical beings, except (and for a small minority) in athletic programs. However, for the purposes of our analysis here, we should acknowledge that the physical self is a prominent part of the whole self, and call for more research on its significance as it interacts with the other qualities that enter into the human condition.

### A Model For Curriculum Design and Evaluation

All this leads us to a design for the construction and evaluation of the curriculum. The six elements of the human condition from developmental psychology and the four elements of the operational goals of teaching may be arranged on a grid as follows:

#### A Grid for Curriculum Design and Evaluation

<table>
<thead>
<tr>
<th></th>
<th>Fluency</th>
<th>Manipulation</th>
<th>Confidence/Value</th>
<th>Persistence</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTELLECTUAL</td>
<td>la</td>
<td>2a</td>
<td>3a</td>
<td>4a</td>
</tr>
<tr>
<td>EMOTIONAL</td>
<td>lb</td>
<td>2b</td>
<td>3b</td>
<td>4b</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>lc</td>
<td>2c</td>
<td>3c</td>
<td>4c</td>
</tr>
<tr>
<td>AESTHETIC</td>
<td>ld</td>
<td>2d</td>
<td>3d</td>
<td>4d</td>
</tr>
<tr>
<td>SPIRITUAL</td>
<td>le</td>
<td>2e</td>
<td>3e</td>
<td>4e</td>
</tr>
<tr>
<td>PHYSICAL</td>
<td>lf</td>
<td>2f</td>
<td>3f</td>
<td>4f</td>
</tr>
</tbody>
</table>

Where these qualities intersect, curriculum questions are raised. For example, cell la raises the question, "How does fluency in a given field contribute to the intellectual growth of a student?" Cell 3c raises the question, "How does confidence and value in a given field contribute to the social growth of a student?" Cell 4f raises the question, "How does persistence in a given field contribute to the sense of physical self of a student?"

All together, there are 24 cells in the grid, hence 24 questions to be confronted by the curriculum planner and the curriculum evaluator. Note that the great preponderance of our current curriculum design and evaluation efforts deal with only two of the cells-la and 2a. That is, we ask in the main only that our curriculum efforts answer the question, "How do fluency and manipulation in a given subject field contribute to the intellectual growth of the student?" Our failure to deal with the other 22 questions implied by this analysis explains in some degree why students are "turned off" by the curriculum, and why the stereotype of the academic person held by the public is so pejorative.

The whole man is much more than an intellectual creature. If not, we should all be monstrous, for a monster is a creature with some of its attributes exaggerated and others missing. Our peculiar pedagogical monster is what is ordinarily called a pedant—someone who is concerned with purely intellectual matters (often ritualized, as in the case of the grammarian) at the expense of growth in the other five aspects of human existence. He may be a towering intellect, but emotionally and socially,
not to mention other qualities, he is an infant. Hence his naivete and puerility.

So one thing the grid tells us is that we have projected a monstrous version of the human condition by our failure to examine seriously 22 out of the 24 elements that belong in comprehensive curriculum design and evaluation. No wonder we are concerned with making the school humane!

Another observation to be made about the grid is that there are areas of it about which we know very little. We know much less about the aesthetic, spiritual, and physical aspects of growth than we do about the others. Our current evaluation schemes tend to leave out the areas of confidence/value and persistence. That whole quadrant of the grid that includes cells 3d through 3f, and 4d through 4f, is difficult to deal with for this reason. By contrast, the quadrant that includes cells 1a through 1c, and 2a through 2c, is much more familiar to us and correspondingly easier to deal with. The diagonal from 1a to 4f is a line of increasingly sparse knowledge and increasing difficulty. It obviously would repay researchers and curriculum developers to attend to it.

What does it mean to be human? We have answered that question here with the principal dimensions of the research in developmental psychology. What does it mean to teach? We have answered that question here with a four category analysis. Where the two intersect, we have found questions, some of them perplexing, that offer a kind of map for curriculum development and evaluation for those of us who would develop a curriculum for the humane school we all seek. This is a proposal for analysis, nothing more. It will be interesting to see where it takes us.

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