

# Values, Diversity and Cognitive Development

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It is often assumed that education for cognitive development, unlike, for example, that for character development or religious education, is value free. Moreover, any educational program that smacks of the imposition of values is held suspect by educators and the public, while intervention to promote cognitive development in children is not. The assumption that cognitive development and its measurement are value free also lies at the heart of much psychological and educational testing. In this article, it will be argued that the promotion of cognitive development is a heavily value-laden enterprise and that educators need to understand this so that they can value, and intentionally nurture, an appropriate diversity of competencies in children. To support this argument, nine claims about values and cognitive development will be developed. Then the definition and assessment of cognitive development will be considered along with the implications for action programs. The argument is grounded in research reported in, and literature reviewed in, two of my previous works published by the Scottish Council for Research in Education—*Parents, Teachers and Children* (1980) and *Opening the Primary Classroom* (1985), but the data have been brought together and reinterpreted in this article to yield new insights. The former publication is based on an evaluation of a Levenstein-type, cognitively oriented, preschool educational home visiting scheme. The latter is an account and evaluation of interdisciplinary, inquiry-oriented, educational programs that aim to foster areas of competence beyond literacy and numeracy in primary school children by making use of project-based activities grounded in the environment around the school.

1. *Cognitive development is not universally valued:* It is often assumed that cognitive development is universally valued. In fact, we found in the course of our evaluation of a preschool home-visiting program that many parents did *not* want their children to ask questions, to make their own observations, to be curious, or to use books to find information they themselves wanted.<sup>1</sup> When asked how important this last was, one parent said, "Oh no, I wouldn't want *that*. Goodness knows what he might come across, poking around in

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books." The rejection of books, knowledge, self-directed learning, initiative, and curiosity—which we encountered widely, particularly among low socioeconomic status parents—is readily apparent in this quotation.

2. *Cognitive development is psychologically bonded to other qualities that may not be valued:* Psychological qualities are not independent of each other. Cognitive ability is widely believed by parents to be related to the tendency to ask questions, the tendency to seek information relevant to one's own purposes, the ability to use language to persuade, cajole, or bully others into helping one to achieve one's own goals, the ability to build up a unique store of specialist information, and the ability to bring to bear relevant past experience.<sup>2</sup> My own work, that of Joan Tough and Kohn and Schooler, and, as widely reported, the more recent work of Feuerstein supports these beliefs.<sup>3</sup> Cognitive ability is related to an orientation toward the future, a tendency to make plans to achieve goals one has formulated for oneself, and the ability to anticipate problems in the future and find ways around them. It is related to curiosity, independence, and adventuresomeness.

Many people who value cognitive development in the abstract do not value critical thinking, question-asking, skepticism, personalized moral codes, the tendency to engage in intellectual activity, the tendency to plan and plot, and the general skill at using verbal strategies to manipulate others that are widely thought to go with it. In my own work, I found that many parents wanted their children to be *dependent on* (rather than independent of) them and that they devalued curiosity, inquisitiveness, an interest in ideas, intellectualism, an orientation toward the future, and bookishness.<sup>4</sup> Contrary to received wisdom, the reason many parents did not read books to their children or encourage them to ask questions was not that they did not understand and appreciate the importance of these activities from the point of view of enhancing cognitive development but that they did not want their children to be curious, to be bookish, to be interested in ways of thinking about things, to be intellectual, or to seek to understand, and question, the reason for instructions.

3. *If people are to develop their own cognitive capacities they will need to engage in activities that may not be valued:* If people are to exercise and develop their cognitive capacities it seems logical to assume (as do many enrichment programs<sup>5</sup> and "middle-class" parents) that they will need to ask questions; anticipate the future; identify their own personal goals and make plans to reach them; set out into the unknown; monitor the effects of their actions and seek to understand why they are not achieving their goals more effectively; explicitly focus on themselves, their goals, and their behavior; reason with others and expect those others to respect their right to have, and to express, personal opinions; and to have, and to pursue, personal priorities and aspirations. To develop the capacity to observe, to reason, to think, to evolve con-

cepts, to evolve high-level schemata that make it possible to identify previously unnoticed problems or to solve previously insoluble problems, they will need to tackle work that engages their interest over an extended period of time. To find ways of representing symbolically,<sup>6</sup> but not necessarily in words, that which has not previously been cognized, to distinguish that which merits attention from "noise," they will need to do such things as wake up at night in an effort to make a barely grasped idea explicit and explore its implications. They will need to prize specialist information out of other people's heads.

If they are to do these things they will need to be encouraged to pursue their own interests and concerns effectively over an extended period of time. (It will need to be their *own* interests that they pursue because they will not otherwise be prepared to devote the energy that is required to engage in the sensitive and demanding activities that are required over a long enough period of time.) They will need to have had numerous experiences of cognitive activity enabling them to undertake tasks they care about in a more satisfying and effective way than they would have been able to do otherwise.

If children are to have such experiences, their caretakers and teachers will need to support them sensitively, intervening only when necessary to ensure the persistence of self-directed activity. They will need to avoid giving specific instructions and directions and taking over child-initiated activity. They will need to help and encourage children to seek out role models who share their own concerns and interests and who are able to portray the components of competent behavior in relation to goals they themselves care about. Such support systems have been described in the home,<sup>7</sup> in schools and universities,<sup>8</sup> and in the workplace.

Yet my research has shown that many people do not value the independent, self-directed activity envisaged in this scenario.<sup>9</sup> They do not want to have children who question and challenge established moral codes. They do not want children who are independent and hard to control. They do not want children who are adventurous and get into scrapes. As we shall see later, they are also often unable or unwilling themselves to create the developmental environments that are required to encourage such activities.

4. *Cognitive development may have consequences for the individual that he or she may dislike:* Cognitive development may bring the opprobrium heaped on those who notice deficiencies in the logic and understanding of their caretakers, who notice previously overlooked problems that could be tackled, who challenge the conventional wisdom—and especially moral wisdom. It may bring the stresses as well as the satisfactions associated with adventuresomeness.<sup>10</sup> It may bring the isolation and mixture of derision and jealousy that innovators commonly have to suffer.<sup>11</sup> It may bring accusations of arrogance and singularity. At lower levels, it may bring the scorn heaped on the

"egghead" or "intellectual" by the adolescent peer group.<sup>12</sup> It may lead children to grow away from their families—both emotionally and geographically.<sup>13</sup>

5. *The activities in which it is necessary to engage if cognitive development is to be promoted may be dangerous:* If such behaviors as perceiving new "things" in the environment, making one's own observations, anticipating the consequences of one's actions, making plans and testing their effectiveness, monitoring the effects of one's behavior and taking corrective action when necessary, and finding one's own information are to be practiced—and thereby perfected into smooth habits or dispositions—it will be necessary for those concerned to follow their own interests and initiate their own activities and monitor the effects. It will be necessary for them to undertake tasks that are new, both to themselves and to their caretakers—for if their caretakers know what the outcome will be they will issue specific directives that will preclude the exercise and development of the tendencies to observe, to evolve new constructs, to initiate action, to decide when an activity should be discontinued, and to monitor the effects of one's actions. It will be necessary for those who care for children not only to avoid giving specific directions, but also to avoid laying down rules; trying to identify what it is that is to be perceived, observed, and recorded; and specifying which activities are to be pursued. It will be necessary to avoid laying down prescriptive moral codes—because these have the effect of absolving those concerned from responsibility for the consequences of their actions, thereby deterring them from considering those consequences in advance, monitoring the effects of their behavior, and initiating further activities to prevent undesirable consequences.<sup>14</sup>

Many parents are able to create developmental environments in which their children can practice the behaviors mentioned above without running serious risks.<sup>15</sup> They also have sufficient time to spend with their children to ensure that they consider possible detrimental consequences of their actions. Such parents spontaneously share their own planning, anticipation of obstacles, and consideration of the long-term social consequences of their actions with their children—and in this way lead their children to develop the habit of guiding their behavior by reference to internalized codes, encourage them to be sensitive to the feelings on the fringe of consciousness that will tell them when things are going wrong or getting out of control, and inculcate the habit of acting effectively on the basis of those insights and feelings. They share their feelings of delight in accomplishments achieved in part through cognitive activity and thereby lead their children to be well disposed toward it, and to feel that it is effective and enjoyable.

Other parents live in environments in which adventurous, inquisitive activity is dangerous.<sup>16</sup> Many lack the time required to think about one problem before another is on them. Still more lack the time, the motivation, and the competencies to promote the development within children of internalized

codes to guide behavior. Many are themselves so preoccupied with gaining a precarious hold on life that they are unable to monitor their children's needs in a sensitive way and provide support when necessary. The import of these observations is that it is, in reality, dangerous for many children to engage in the activities in which they would need to engage in order to catalyze their own cognitive development.

There is also often a cyclical process at work: Protectiveness of, and fearfulness for, children leads some parents to fail to create opportunities for their children to adventure and inquire. As a result, these children fail to develop the sensitivities needed to know when things are getting out of hand, when corrective action is necessary, when danger lurks, when to stop, and when to seek help. Consequently, when they encounter potentially dangerous situations, they are seen to lack the strategies required to monitor their environments and behavior. They lack the internalized moral codes—or understanding of the long-term social consequences of particular actions—they need to tell them when their behavior will be inappropriate and unacceptable to others. The resulting accidents and misbehaviors confirm the parents in their view that the children are incompetent and immoral and in need of direction and protection. The consequent prescriptions and restrictions further limit the opportunity to develop the competencies needed to engage in self-directed behavior.

6. *The promotion of cognitive development in children may require adults to engage in activities they do not value:* If children's cognitive development is to be facilitated, it is necessary for their adult caretakers to treat them with respect, as individuals who are entitled to pursue interests, opinions, and priorities of their own.<sup>17</sup> It is necessary for caretakers—including teachers—to treat children as basically competent people whose talents are to be exercised and developed rather than as incompetents who are to be directed, instructed, and taught. It is necessary for these caretakers to share the reasons for their injunctions and requests. It is necessary for them to create opportunities for the children to share in their own planning, their own conceptualizing, their own attempts to guide their behavior by reference to the long-term social consequences of their actions, and their own attempts to resolve value dilemmas. It is necessary for them to encourage children to ask questions and to be in a position to help them seek answers to those questions. It is necessary for them to sensitively monitor children's gestures and innuendos and to mull over their implications for the types of activity in which it would be most appropriate to engage them to promote their development.

Many people lack both the desire and the ability to engage in these activities. Such democratic child-rearing practices may be regarded as "weak" or effeminate, and creating environments that are maximally developmental from a child's point of view may be incompatible with creating environments that proclaim one's own status to others.

7. *The promotion of cognitive development may demand abilities that caretakers have not developed—in part because they do not value development in themselves of psychologically bonded qualities:* Not only may such activities be in conflict with basic values; the caretakers concerned may have difficulty answering children's questions, they may have difficulty putting the reasons for their commands into words, they may lack the sensitivities needed to know when, and how, to intervene to prevent children's activities from becoming dangerous or getting out of hand.

In fact, many parents, teachers, and managers lack the abilities required to manage the behavior and development of autonomous, reflective, self-motivated individuals.<sup>18</sup> They lack the abilities required to identify and harness multiple interests, motives, and patterns of competence on the part of children or subordinates. They lack the abilities required to articulate shared goals and link their own goals to those of their children, pupils, or subordinates. They lack faith in their children's or subordinates' goodwill and competence to cope on their own. They lack the ability to identify the contributions the children or subordinates could make to a joint program of work and they lack the ability to release the energies of other children or adults in identifying the potential contributions of others. They lack the concepts needed to think about multiple talents and their development and utilization. They lack the ability to make others feel strong and capable of taking responsibility. They lack the abilities, the inclination, and the motivation needed to allow other people to share in their own thinking, planning, adventuring, feeling, and monitoring behavior. In short, they lack most of the abilities identified as crucial to effective management and personnel development in the workplace.<sup>19</sup> They resort to commands, prescription, policing, and checking instead of creating developmental environments characterized by climates of delegated responsibility and mutual trust and confidence.

8. *The promotion of the development of the cluster of psychologically bonded characteristics required to catalyze cognitive development may require caretakers to engage in activities that are precluded by constraints in the environments in which they live and work:* If adults are to treat children in the sensitive, respectful manner that seems to be required to promote the development of the cluster of qualities children need to catalyze their own cognitive development, the adults concerned must not only possess the abilities mentioned above; they must also have time. If they are to be sensitive to the child and able to treat him or her in a developmental manner, they must also not be preoccupied with such problems as dealing with a husband who comes home drunk, getting their electricity turned on again, or wondering where the next meal is coming from. (We may note in passing that, if Maslow and Bronfenbrenner are right, freed of such constraints, they will then be able to engage in behaviors that are not only self-actualizing, but also conducive to the development of others.<sup>20</sup>)

These considerations apply specifically to teachers. If they are under pressure to demonstrate pupil achievement on tests that measure only factual

knowledge, and if they have insufficient contact with their pupils to get to know each of them, their interests, and the meanings of their gestures and innuendos, they will be unable to engage in the activities that are required.<sup>21</sup>

9. *The promotion of cognitive development and associated personal qualities in children may have consequences the caretakers do not value:* Not only may the promotion of cognitive development and the qualities that are psychologically bonded to it lead children to ask questions that caretakers have difficulty answering and to engage in independent behavior that caretakers have difficulty managing, but the development of these qualities by children may have other effects the caretakers do not want. Many of the parents we interviewed feared that the development of self-confidence, an interest in books, and a tendency to ask questions would lead their children to behave in "intellectual" ways that would make them (the parents) feel inferior. The children would "put on airs" and grow away from them. Independent children would be harder to discipline and control than those who "really needed" them. Their children would pass examinations, become geographically mobile, and neglect to care for them in their old age.

#### SOME ADDITIONAL CONSIDERATIONS AND SOME IMPLICATIONS

Having reviewed a number of ways in which cognitive development is linked to values, we may now explore some of the implications. In the course of doing so, other research findings will be introduced.

#### VALUES, SOCIAL CLASS, AND SCHOOL SUCCESS

As Kohn and Hess and Shipman have shown, the values we have been discussing are markedly associated with socioeconomic status.<sup>22</sup> Higher socioeconomic status parents are more likely than lower socioeconomic status parents to stress the importance of developing an interest in books, the skills required to find one's own information (from books and from other people), independence, originality, and managerial skills. Lower socioeconomic status parents are more likely to foster dependence, deference, instant obedience, the ability to stick up for oneself, toughness and strength, and learning what one is told.

The majority view (commonly described as "working-class") creates difficulties for those teachers who take seriously the objective of fostering such qualities as an inquiring mind or the ability to work independently. It is very difficult to create a classroom atmosphere in which some pupils are encouraged to develop the sensitivities and reflective processes required for creativity, to observe effectively, and to monitor audience reaction in order to discover the strengths and weaknesses of one's communications, when some children in the room demand explicit didactic instruction, facts to memorize,

strictly enforced codes of behavior, and displays of toughness and strength from their teachers. These constraints (along with others discussed in Raven, Johnstone, and Varley<sup>23</sup>) operate to drive sensitive, inquiry-oriented teaching directed toward these wider objectives out of classrooms. It is for these reasons that, despite teachers' espousal of higher-order objectives,<sup>24</sup> schools are more correctly described as working-class than as middle-class institutions.

There is another way in which class-based conflict contributes to driving sensitive developmental activity out of schools. One might think that, even if these goals could not be pursued with *all* children, they could at least be pursued with some of them. Not so. The notion that one might pursue different goals with different children is precluded by the widely held view that teachers should treat all children in the same way.<sup>25</sup> This is based on the argument that, if they did not, the children of the more articulate and the more powerful (i.e., the middle class) would get the best deal. Furthermore, although many parents do not want their children to develop the kinds of qualities we have shown to be associated with cognitive development, they know that these qualities make for life success. They therefore become envious of those who do develop these essentially disliked qualities. For this reason, even though they do not want teachers to help their own children to develop these qualities, they object to their helping other children to do so. Consequently, unless "equality" can be redefined as "equal access to differentiated treatment," and more respect for high-level working-class competencies and values and competencies other than one's own engendered, a concern with equality drives education designed to foster the cluster of qualities we have been discussing out of schools.

One important implication of the results that have been summarized is that the interpretation most commonly placed on the widely reported correlations between home background, school success, and life success is probably incorrect. Instead, it appears that parents are their children's most important educators, not in the sense that some are more likely than others to promote their children's success at school, but in the sense that some are more successful than others at promoting the growth of the competencies needed to cope with life, and that incidentally promote success at school. It is parents—and, in most cases,<sup>26</sup> parents alone—who promote the development of independence, the capacity to observe, the capacity to organize one's life, and confidence in dealing with adults. It is these qualities, which are not the same as (but are psychologically bonded to) cognitive development, rather than cognitive development itself, that probably makes for the greater school and life success of children from middle-class homes. Thus, the task for those who wish to intervene in the educational system is to make schools more like middle-class homes, rather than to make working-class homes more like schools. (Ways in which this can be done, and the barriers to doing so, are fully discussed in *Opening the Primary Classroom*.<sup>27</sup>)

## THE DEFINITION AND ASSESSMENT OF COGNITIVE DEVELOPMENT

This may be an appropriate point at which to draw attention to the way in which the concept of cognitive development has been used and defined—both operationally and explicitly—in the literature.

Operationally, cognitive development has most often been defined by reference to IQ tests, and increases in scores have been achieved by teaching to the tests.<sup>28</sup> However, Joan Tough; Winter, McClelland, and Stewart; and others have conducted empirical studies in which cognitive processes have been described and assessed as the ability to do such things as prioritize goals, notice problems and make them explicit, build up and bring to bear a store of idiosyncratic specialist knowledge (not necessarily in a verbal form) in order to solve problems one has noticed and cares about, anticipate obstacles to the achievement of one's goals, and win the cooperation of others in order to achieve one's purposes.<sup>29</sup> Significantly, as reported by Jensen and others, Feuerstein has dramatically reoriented his work in this direction, making use of the concept of "mediated learning."<sup>30</sup>

This second set of abilities—perhaps better termed "motivational dispositions"—forms part of a wider set of components of competence.<sup>31</sup> Crucial to the ability to perceive and cognize, these components include such things as sensitivity to one's feelings and emotions (from which all new ideas and effective communications spring) and willingness to ponder their implications, persistence, inventiveness, creativity, leadership, and followership.

These components of competence involve values in two rather different ways. In the first place, no one is going to invest the tremendous amount of energy required to venture into the unknown, to try to invent new ways of doing things, to seek to reach previously unidentified goals (which no one can see, still less value), to engage in innovatory behavior, to monitor the effects of that behavior and learn more about the situation one is dealing with by so doing, to gain the cooperation of others in such ventures, and to focus on, and strive to make explicit, the fleeting feelings on the fringe of consciousness that form the basis of all efficient and creative activity unless he or she values the goals being worked toward. This is why it is so important—as mothers who value the development of these qualities in their children, and teachers who foster such qualities in schools, stress—to create developmental environments in which children can practice and develop these qualities in the course of pursuing activities *they themselves* have chosen. It is also why it is important, as these mothers also emphasize, to respond to the child in a sensitive manner as and when, and only as and when, the child indicates that assistance is needed.

Not only can these broader qualities—as many parents maintain—be fostered only in relation to goals the child values; they can, if the theoretical viewpoint suggested here is correct, be *assessed* only in relation to goals indi-

vidual children value. We will not be able to see children thinking, inventing, or bringing to bear past experiences, unless they value the goal toward which they are working. Now, if they actually value deference, dependence, instant obedience, toughness and strength, or warm personal relationships, we are unlikely to find them using language or engaging in cognitive processes in the ways described by Joan Tough in relation to intellectual goals, but we may well do so if we set them the task of finding ways of achieving these other goals more effectively. So the actual notion of assessing the ability to engage in cognitive activities without reference to values does not make sense. One cannot conclude that children lack *the ability* to engage in cognitive processes from their performance on tests that do not relate to their purposes.

It seems probable that more will be gained from setting out to measure cognitive and other components of competence in relation to the particular activities the person being tested values than from maintaining, as Sternberg and Gardner have done, that the actual abilities are different when developed and displayed in pursuit of different goals.<sup>32</sup> If we allow that people's abilities can be meaningfully assessed only in relation to their values it becomes possible—as I have shown in *Competence in Modern Society*—to assess a much wider range of competencies that have previously eluded the conceptual and operational grasp of psychologists and educators.

Tests that are to measure cognitive and other competencies effectively will not only have to allow for the fact that such competencies will show up only when people are engaged in activities they value; they will also have to allow for the fact that the tasks in the course of which such competencies will be exercised are likely to be extended in time. Few people will, for example, show evidence of the difficult activities—dependent on specialized acquired knowledge as they are—that are required to evolve new ways of thinking about things in relation to short-term tasks, which do not relate to their preoccupations, introduced by a psychologist. Thus, “measuring” cognitive ability, and other components of competence, does not simply involve finding new tasks to replace paper-and-pencil tests. It involves assessing cognitive development in the course of observing people when they are engaged in activities that are important to them and are intermittently sustained over an extended period of time.<sup>33</sup> Our concern for value-free tests has therefore resulted in a collection of studies that are essentially meaningless.

#### COGNITIVE DEVELOPMENT AND DISCIPLINE

Having challenged the notion that cognitive development is value-free, we may now underline further the connections between cognitive development and discipline, because it is in this area that the tensions become most visible. The tendency to define *discipline* and *respect* as unquestioning obedience, instant compliance with external standards, and fear of authority results in

a climate in which children have little opportunity to develop the components of competence mentioned earlier—including the tendency to make their own observations and think for themselves. Children brought up in homes in which this is the case have little opportunity to see that, if they observe and think about the world, they can reason with adults in such a way as to get them to change their minds and their behavior so that they can reach their own goals more effectively. They have less opportunity to *practice* cognitive activities and see them produce results they desire. For these reasons it is worth examining parents' opinions on the way in which respect is to be fostered in a little more detail.

Many of the high-socioeconomic-status parents I interviewed said, “Respect is something you *earn*, not something you teach.”<sup>34</sup> In contrast, many low-socioeconomic-status parents were quite clear that respect was indeed something you taught—and by Jove they meant it! A parent who is concerned to *earn* respect will obviously try to behave in ways that are deserving of respect. Such parents will therefore be inclined to behave in ways that are above reproach. They will be more likely to discuss their actions, their reasons for them, and their probable long-term consequences with the child. These considerations may involve the future of the child, his or her family, or the society in which they all live.

To do these things, parents not only have to talk to children, but also to make their own values clear, to share their understanding of human behavior and the workings of the family and society, to share their understanding of cause and effect in human behavior, and to give the children insight into the distant causes and consequences of immediate behavior. It is in this way that cognitive development and moral development become closely linked.

Particular attention may be drawn to the fact that such parents are allowing their children to *share in* their cognitive processes. They are modeling cognitive processes in action and allowing their children to see their value in helping them to gain control over their own environments and to lead their lives effectively. They are also allowing their children to practice these activities and experience the benefits for themselves.

Turning to the other side of the coin, an effort to treat children with respect is likely to result in the creation of opportunities for them to talk, reason (with authority), and consider the long-term consequences of their actions and make explicit and discuss the values, codes, and long-term considerations that should guide those actions. In the course of doing this, children will practice complex cognitive activities. They will, for example, imagine and anticipate possible long-term consequences of their actions. They will imagine barriers to achieving their goals. They will consider a broad range of possibly conflicting consequences of their actions and choose between them. They will develop confidence in their ability to handle ideas, come to think of themselves as individuals capable of handling such ideas, and who

have a right to opinions of their own. They will come to think of authority as something that is open to reason, as something they are *entitled* to seek to influence, and, if parents respond, will experience the benefits of rational argument.

In such a pattern of interaction children will be exposed to a wide range of viewpoints and ideas. They will therefore be less likely to find further new ideas unfamiliar and frightening. They will have more pegs on which to hang them. They will therefore be more open to new ideas and innovations and more likely to explore the relevance of such ideas to their own behavior.

#### ADDITIONAL CONSTRAINTS ON TEACHERS

This connection between cognitive development and the emotive issue of discipline helps to explain why teachers who set out to promote cognitive development in children, whether in schools or in one-to-one relationships in the homes of "disadvantaged" children, very quickly find themselves in difficulty. If they are to promote cognitive development they find that they have to encourage children and their parents to accept different discipline strategies.

My research findings illustrate some of the other problems such teachers encounter. Even in one-on-one situations, when teachers try to engage with children other than their own in the sensitive, developmental activities they undertake with their own children, they find themselves deflected back onto teaching content. The child's expectations are partly responsible for this. In addition, they are with such children for a short period of time and therefore feel obligated to "make things happen" rather than to wait, as they would do with their own children, for the child to do something and then develop that activity so as to capitalize on the child's interests to create situations in which he or she will practice and develop the cognitive competencies of which we have spoken. They also find it necessary to teach the child vocabulary and information in order to be able to demonstrate to themselves, to the child's mother, and to their superiors that they have achieved something. They end up behaving like working-class mothers—or teachers—instead of facilitating growth in the way that is characteristic of middle-class mothers. Thus, instead of modeling mothering behavior for mothers to emulate, they find themselves modeling teacher behavior.

#### SOCIAL CLASS, VALUES, AND SOCIAL MOBILITY AND THEIR IMPLICATIONS FOR EDUCATION

In order to legitimize the notion that schools may do different things with different pupils, it is important to introduce some research findings at this point. Social mobility, both upward and downward, is selective by the value-

laden competence (including cognitive development and the competencies that are psychologically bonded to it) that we have been concerned with in this article.<sup>35</sup> Thus, downwardly mobile adolescents (who have presumably come from backgrounds where originality, independence, and thinking for oneself are stressed) want prescriptive codes and rules to guide their lives; they value instant obedience in themselves and others; and they do not wish to take responsibility for their own actions or those of others. Upwardly mobile individuals, in contrast, even when they come from unpromising backgrounds, are likely to stress the importance of developing independence, initiative, leadership, and responsibility. Two things would seem to follow from these results. One is that the influence of parents' socioeconomic status has, in the past, been overestimated. The other is that the well-documented variation in values between people who occupy different positions in society may have a degree of functional significance that has not previously been appreciated. As a society, we appear to need a wide variety of people who wish to exercise and develop very different patterns of competence.

Given that this suggestion will raise the specter of divisiveness and a caste society, it is important, first, to draw attention to the extent of social mobility in our society. Jencks et al. found that, for the United States, the status inequality between brothers amounted to 82 percent of status variability in general.<sup>36</sup> Payne et al. found that 71 percent of adults in Scotland had been upwardly or downwardly mobile from their fathers' socioeconomic status, and that 10 percent of those holding Class 1 jobs had come all the way from Class 7 backgrounds.<sup>37</sup> Similar levels of social mobility were evident in my data. Background is therefore a great deal less important than is commonly assumed.

Second, it is important to emphasize that society needs a wide variety of people with different concerns and areas of competence and that our schools at present do little to foster the qualities society most badly needs.<sup>38</sup> Instead of fostering this variety of competencies, schools are at present most appropriately viewed as a very expensive means of legitimizing the rationing of privilege.<sup>39</sup>

It would seem to follow from these observations that (1) it is important to find ways of respecting variation in pupils' values and concerns and fostering different qualities in different children and (2) there would be little danger of creating a caste society if we did so. However, the more general findings and reflections presented earlier in this article point to a deeper conclusion. This is that, if we are to promote the development of the cluster of qualities we have seen to be associated with, but sharply distinguishable from, cognitive ability among *any* children, then greater variety in educational programs is essential. Only in this way will we be able to prevent other children—who have different talents and competencies to develop—from destroying the necessary developmental experiences.

Two other implications of the data and reflections I have presented for those who wish to promote cognitive development may now be highlighted.

The first is that intervention programs that encourage children to ask questions, to read, and to find their own information, may, on the one hand, create unanticipated problems for the child's parents (especially in the discipline area) and, on the other hand, lead parents to have expectations about the subsequent school and life success of their children that will not be fulfilled. Even school success, achieved without having developed the other perceptions, expectations, and components of competence described earlier (and which are fostered by middle-class parents), is, as Bachman and his colleagues have shown, unlikely to make for life success.<sup>40</sup> It is for such reasons that some intervention programs might be better viewed as interference.<sup>41</sup>

The second is that the place to start with intervention programs may be by helping to establish community-support networks for parents. These would enable them to get control over some of the life problems that prevent them from relating to their children as they would like, enable them to relate to their children in a more relaxed and developmental manner, and enable them to model effective cognitive processes—planning, monitoring, and improving the effectiveness of their behavior, and influencing authorities—for their children.

However, before that conclusion is too avidly accepted, it is important to emphasize that we have seen in this article that it may be entirely appropriate for children who live in different types of environments to develop different preoccupations and patterns of competence, that parents' values may be entirely appropriate in the environments in which they find themselves, and that, because of personal ability deficits and environmental constraints, many parents may not be able to engage in the activities others believe to be of crucial importance. Under these circumstances it is entirely possible that the suggestion just made—strongly supported though it is by Bronfenbrenner<sup>42</sup>—may be quite wrong. My data suggest that such parents might, under such circumstances, choose to pursue their own current values more wholeheartedly, rather than move on to the self- and child-actualizing behavior so much valued by Bronfenbrenner and by middle-class parents.

### SUMMARY

The term *Cognitive Ability* has been used to refer to two distinct sets of processes: (1) the ability to obtain high scores on IQ tests, and (2) the set of competencies that includes the ability to problematize, the ability to find better ways of thinking about things, the ability to bring to bear relevant past experiences, and the ability to invent ways of overcoming problems that are likely to arise in the future.

Defined either way, cognitive development is anything but value-free—both in the sense that the activity itself may not be valued and in the sense that the abilities are likely to be developed and displayed only in relation to goals the person concerned cares about. We therefore need to reexamine the concept of cognitive development and, in particular, develop new means of assessing its varieties.

Going beyond the conceptual and measurement problems, it has been argued that cognitive development is psychologically bonded to other qualities that are not in themselves correctly described as cognitive abilities. These other qualities include adventuresomeness and personalized moral codes. Cognitive development is likely to be promoted only if these other qualities are fostered simultaneously. Yet these other qualities are even more value-laden than is cognitive ability itself.

Finally, the activities in which parents, teachers, managers, children, and employees need to engage if cognitive development is to be promoted may not only not be valued, they may be beyond the competence of those concerned, may have consequences those concerned cannot cope with, and may bring real dangers. Relevant activities may also be precluded by features of the environment in which those concerned live and work.

The link between values and cognitive development—and especially discipline strategies and cognitive development—has been seriously underestimated when enrichment programs to promote cognitive development in young children have been designed. That is why such programs so often smack of “imposing middle-class values.” Strategies likely to promote cognitive development among adults and children whose values differ from those of the teacher or manager concerned are very different indeed from those that typify schools, but are not unlike those adopted by some parents. Failure to come to terms with these values issues has resulted in schools' being more correctly described as being dominated by working-class than middle-class educational values.

If educators—whether parents, teachers, or managers—are to work more effectively in this area it will be necessary for them to acknowledge, and come to terms with, the value-laden nature of their work. It will be necessary for them to foster different qualities in different children and to foster cognitive development in the course of activities directed toward different goals with different children. If they are to do this we, as a society, will need to do more to recognize the importance of a wider range of value-based competencies. And if our fellows—young or old—are to get credit for possessing these qualities we will need to develop new, value-based measures, not only of cognitive development, but of competence in general.

### Notes

1 Details of the scheme will be found in G. McCail, *Mother Start: An Account of an Educational Home Visiting Scheme for Pre-School Children* (Edinburgh: The Scottish Council for Research in Education, 1981; distributed in North America by the Ontario Institute for Studies in Education, Toronto).



The evaluation is reported in J. Raven, *Parents, Teachers and Children* (Edinburgh: The Scottish Council for Research in Education, 1980; distributed in North America by the Ontario Institute for Studies in Education, Toronto). While the methodology adopted for the latter was primarily "illuminative," the book also contains extensive survey data obtained from the parents of both experimental and control groups.

2 Raven, *Parents, Teachers and Children*.

3 J. Tough, *Focus on Meaning: Talking with Some Purpose to Young Children* (London: Allen & Unwin, 1973); and M. L. Kohn and C. Schooler, "The Reciprocal Effects of the Substantive Complexity of Work and Intellectual Flexibility: A Longitudinal Assessment," *American Journal of Sociology* 84 (1978): 24-52. See, for example, M. R. Jensen, "The LPAD and Low Functioning Children," in Report of a Workshop for American Indian Educators: *To Sing our Own Songs* (New York: Association on American Indian Affairs, 1985).

4 Raven, *Parents, Teachers and Children*; but B. Jackson and D. Marsden, found the same thing (see *Education and the Working Class* [London: Routledge & Kegan Paul, 1962]).

5 A classification of intervention programs and a review of their relative effectiveness will be found in J. Raven, "Early Intervention: A Selective Review of the Literature," *Collected Original Resources in Education* 5 (1981): F1-C6.

6 The word *symbol* is also misleading. It is not clear how these fleeting feelings or ideas are represented.

7 D. W. MacKinnon, "The Nature and Nurture of Creative Talent," *American Psychologist* 17 (1962): 484-95; B. Bloom, *Developing Talent in Young People* (New York: Ballantine Books, 1985); U. Bronfenbrenner, *The Ecology of Human Development* (Cambridge: Harvard University Press, 1979); Tough, *Focus on Meaning*; B. L. White et al., "Competence and Experience," in *The Structuring of Experience*, ed. I. C. Uzgiris and F. L. Weizmann (New York: Plenum Press, 1977); and B. L. White et al., *Experience and Environment: Major Influences on the Development of the Young Child*, Vol. 2 (Englewood Cliffs, N.J.: Prentice Hall, 1978).

8 J. Raven, J. Johnstone, and T. Varley, *Opening the Primary Classroom* (Edinburgh: The Scottish Council for Research in Education, 1985; distributed in North America by the Ontario Institute for Studies in Education, Toronto); D. G. Winter, D. C. McClelland, and A. J. Stewart, *A New Case for the Liberal Arts* (San Francisco: Jossey Bass, 1981); G. O. Klemp, M. T. Munger, and L. M. Spencer, *An Analysis of Leadership and Management Competencies of Commissioned and Non-commissioned Naval Officers in the Pacific and Atlantic Fleets* (Boston: McBer and Co., 1977); E. Jaques, *A General Theory of Bureaucracy* (London: Heinemann, 1976); Kohn and Schooler, "The Reciprocal Effects of the Substantive Complexity of Work and Intellectual Flexibility"; and J. Raven, *Competence in Modern Society: Its Identification, Development and Release* (London: H. K. Lewis, 1984; distributed in North America by the Guidance Centre of Toronto).

9 Raven, *Parents, Teachers and Children*; but again see Jackson and Marsden, *Education and the Working Class*.

10 D. C. McClelland, *The Achieving Society* (New York: Van Nostrand, 1961).

11 See MacKinnon, "Nature and Nurture"; E. B. Roberts, "A Basic Study of Innovators: How to Keep and Capitalize on their Talents," *Research Management* 11 (1968): 249-66; D. Schön, *Beyond the Stable State* (London: Penguin, 1971/73); and R. M. Kanter, *The Change Masters: Corporate Entrepreneurs at Work* (Hemel Hempstead: Unwin Paperbacks, 1985).

12 J. S. Coleman, *The Adolescent Society* (New York: Free Press, 1961); Jackson and Marsden, *Education and the Working Class*; D. H. Hargreaves, *Social Relations in a Secondary School* (London: Routledge & Kegan Paul, 1967); and F. Musgrove, *Youth and the Social Order* (London: Routledge & Kegan Paul, 1964).

13 Jackson and Marsden, *Education and the Working Class*; and J. B. Mays, *Growing Up in the City* (Liverpool, England: Liverpool University Press, 1954).

14 See MacKinnon, "Nature and Nurture"; D. C. McClelland et al., *Talent and Society* (Princeton, N.J.: Van Nostrand, 1958); McClelland, *Achieving Society*; idem., "What Behavioural Scientists Have Learned about How Children Acquire Values," in *The Development of Social Maturity*, ed. D. C. McClelland (New York: Irvington Press, 1982); idem. et al., "The Effects of Child Rearing Practices

on Adult Maturity," in *Development of Social Maturity*; Raven, *Parents, Teachers and Children*, idem., Johnstone, and Varley, *Opening the Primary Classroom*; and C. W. Taylor and F. Barron, eds., *Scientific Creativity* (New York: Wiley, 1963).

15 Raven, *Parents, Teachers and Children*, and Tough, *Focus on Meaning*.

16 See Raven, *Parents, Teachers and Children*.

17 J. Chan, "Correlates of Parent-Child Interaction and Certain Psychological Variables among Adolescents in Hong Kong," in *Perspectives in Asian Cross-Cultural Psychology*, ed. J. L. M. Binnie-Danson (Lisse, Netherlands: Swets and Zeitlinger, 1981).

18 See Raven, *Parents, Teachers and Children*, idem., Johnstone, and Varley, *Opening the Primary Classroom*; Klemp, Munger, and Spencer, *Analysis of Leadership and Management Competencies*, and Raven, *Competence in Modern Society*.

19 See Klemp, Munger, and Spencer, *Analysis of Leadership and Management Competencies*; J. Raven and T. Dolphin, *The Consequences of Behaving: The Ability of Irish Organisations to Tap Know-How, Initiative and Responsibility* (Edinburgh: The Competency Motivation Project, 1978); and Raven, *Competence in Modern Society*.

20 A. Maslow, *Motivation and Personality* (New York: Harper, 1954); and U. Bronfenbrenner, "Reality and Research in the Ecology of Human Development," *Proc Amer Philos Soc* 119 (1975): 439-69.

21 J. Raven, *Education, Values and Society: The Objectives of Education and the Nature and Development of Competence* (London: H. K. Lewis, 1977); and idem., Johnstone, and Varley, *Opening the Primary Classroom*.

22 See M. L. Kohn, *Class and Conformity: A Study in Values* (Illinois: Dorsey Press, 1969); idem., "Social Class and Parental Values," *American Journal of Sociology* 64 (1959): 337-51; idem., "Social Class and Parent-Child Relationships: An Interpretation," *American Journal of Sociology* 68 (1963): 471-80; and R. D. Heas and V. C. Shipman, "Early Experience and the Socialisation of Cognitive Modes in Children," *Child Development* 36 (1965): 869-86.

23 Raven, Johnstone, and Varley, *Opening the Primary Classroom*.

24 Raven, *Education, Values and Society*.

25 Raven, *Parents, Teachers and Children*.

26 The general failure of schools to foster such qualities—or even to employ appropriate educational processes—is fully documented in J. C. Flanagan, *Perspectives on Improving Education from a Study of 10,000 30-year olds* (New York: Praeger Publishers, 1978); J. Goodlad, *A Place Called School* (New York: McGraw-Hill, 1983); L. D. Johnston, *The American High School: Its Social System and Effects* (Ann Arbor, Mich.: Institute for Social Research, 1973); Raven, *Education, Values and Society*, and idem., "A Nation Really at Risk: A Review of Goodlad's 'A Place Called School,'" *Higher Education Review* 18 (1986): 65-79. However, schools that do foster such qualities are described in R. G. Barker and P. V. Gump, *Big School Small School* (Stanford, Calif.: Stanford University Press, 1948); P. E. Jacob, *Changing Values in College* (New York: Harper Bros., 1956); P. W. Jackson, *The Practice of Teaching* (New York: Teachers College Press, 1986); Raven, *Opening the Primary Classroom*; and Winter, McClelland, and Stewart, *New Case for Liberal Arts*.

27 Raven, Johnstone, and Varley, *Opening the Primary Classroom*.

28 C. Bereiter and S. Englemann, *Teaching Disadvantaged Children in the Pre-School* (Englewood Cliffs, N.J.: Prentice Hall, 1966); M. Budhof, L. Corman, and A. Gimon, "An Educational Test of Learning Potential Assessment with Spanish Speaking Youth," *Interamerican Journal of Psychology* 10 (1976): 13-24; P. I. Jacobs, *Up the IQ!* (New York: Wyden Books, 1977); R. Feuerstein, *The Dynamic Assessment of Retarded Performers* (Baltimore: University Park Press, 1979); and idem., *Instrumental Enrichment* (Baltimore: University Park Press, 1980).

29 Tough, *Focus on Meaning*; and Winter, McClelland, and Stewart, *New Case for Liberal Arts*.

30 Jensen, *LPAD and Low Functioning Children*.

31 See D. C. McClelland and C. Dailey, *Evaluating New Methods of Measuring the Qualities Needed in Superior Foreign Service Workers* (Boston: McBer and Co., 1973); idem., *Professional Competencies of Human Service Workers* (Boston: McBer and Co., 1974); D. G. Winter, *An Introduction to L.M.E.T. Theory and Research* (Boston: McBer and Co., 1979); Klemp, Munger, and Spencer, *Analysis of Leader-*

ship and Management Competencies; L. M. Spencer, *Soft Skill Competencies*. Edinburgh: The Scottish Council for Research in Education, 1983, distributed in North America by McBer, Boston); Raven, *Education, Values and Society*; and idem, *Competence in Modern Society*.

32 R. J. Sternberg, *Intelligence Applied* (New York: Harcourt Brace Jovanovich, 1986); H. Gardner, *Frames of Mind* (New York: Basic Books, 1983); idem, *The Mind's New Science* (New York: Basic Books, 1985); and T. C. Hatch and H. Gardner, "From Testing Intelligence to Assessing Competencies: A Pluralistic View of the Intellect," *Roeper Review* 8 (1986): 147-50.

33 This is not to say that such observations must be made *in situ* or consist only of observations of overt behavior. They could be made by means of tools that enabled us to look at the representations of such activities inside peoples' heads. Indeed, it is essential to assess the cognitive, affective, and conative activities that are going on both while people are engaged in overt behavior and while they are apparently quiescent. Ways in which such information can be obtained include Kelly's Repertory Grid methodology (G. A. Kelly, *The Psychology of Personal Constructs*, Vol. 1: *A Theory of Personality* [New York: Norton, 1955]); McClelland's Projective Methodology and Behavioural Event Interviewing (D. C. McClelland, in J. W. Atkinson and D. C. McClelland *Motives in Fantasy, Action and Society* [New York: Van Nostrand, 1958]; and D. C. McClelland, *Guide to Behavioural Event Interviewing* [Boston: McBer and Co., 1978]); and Fishbein's Value-Expectancy-Instrumentality Methodology (M. Fishbein, "Attitudes and the Prediction of Behaviour," in *Readings in Attitude Theory and Measurement*, ed. M. Fishbein [New York: Wiley, 1967]), particularly as I have developed it (Raven, *Competence in Modern Society*); and J. Raven and T. Varley, "Some Classrooms and Their Effects: A Study of the Feasibility of Measuring Some of the Broader Outcomes of Education," *Collected Original Resources in Education* 8, no. 1 (1984): F4 G6. As I have shown in an article submitted for publication elsewhere, the sharp distinction between motives and values that McClelland has repeatedly made (but see especially his "How Motives, Skills and Values Determine What People Do," *American Psychologist* 40 [1985]: 812-25) cannot be sustained. The discrepant results he cites are to be explained by the lack of construct validity in the questionnaire motive measures. These do not assess, as do McClelland's "motive" measures, the respondents' spontaneous tendency to bring to bear multiple competencies in order to achieve valued goals. McClelland's projective motive measures are, therefore, anything but independent of values—but they follow precisely a measurement model that needs to be adopted more widely in psychology and education. (This argument is fully developed in Raven, *Competence in Modern Society*.)

34 J. Raven, "On the Components of Competence and Their Development in Education," *Teachers College Record* 78, no. 4 (May 1977): 457-76.

35 J. Raven, *Pupil Motivation and Values* (Dublin, Ireland: The Irish Association for Curriculum Development, 1976); idem, *Education, Values and Society*; and J. Newson and E. Newson, *Perspectives on School at Seven Years Old* (London: Allen & Unwin, 1978).

36 C. Jencks et al., *Inequality: A Reassessment of the Effect of Family and Schooling in America* (New York: Basic Books; London, England: Penguin Books, 1972/73).

37 G. Payne, G. Ford, and M. Ulas, *Education and Social Mobility: Some Social and Theoretical Developments* (Plymouth, England: Organisation of Sociologists in Polytechnics, 1979); but see also K. Hope, *As Others See Us: Schooling and Social Mobility in Scotland and the United States* (New York: Cambridge University Press, 1985).

38 See Raven, *Competence in Modern Society*; Johnston, *American High School*; Flanagan, *Perspectives on Improving Education*; L. D. Johnston and J. G. Bachman, "Educational Institutions," in *Understanding Adolescence*, ed. J. F. Adams, 3rd ed. (Boston: Allyn and Bacon, 1976); pp. 29-315; and Goodlad, *A Place Called School* for evidence to support these statements.

39 Jencks et al., *Inequality*.

40 J. G. Bachman, P. M. O'Malley, and J. Johnston, *Adolescence to Adulthood: Change and Stability in the Lives of Young Men* (Ann Arbor, Mich.: The Institute of Social Research, 1978).

41 This argument is developed more fully in J. Raven, "Intervention as Interference," *Scottish Educational Review* 12 (1980): 120-30.

42 U. Bronfenbrenner, *Is Early Intervention Effective?* (Washington, D.C.: U.S. Dept. H.E.W., Office of Child Development, 1974).

## Giftedness as a Social Construct

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Critical analyses of gifted education are not new; many authors have debated such issues as who should be admitted to these programs, what kinds of services should be provided, how such programs should be financed, and so forth. This kind of discussion and debate, however, is self-limiting because it asks questions based on certain assumptions, presumably shared by all the participants. This article will consider the assumptions underlying gifted education, how these have shaped the direction of the field, and what other kinds of questions these assumptions raise.

### ASSUMPTIONS UNDERLYING GIFTED EDUCATION

Two key assumptions that underlie both gifted education and the advocacy approaches of those in the field will be examined here: (1) Gifted children represent an empirically identifiable population, and (2) the needs of that population are significantly different from those of children in general.

Although there is considerable discussion within the field of gifted education concerning how giftedness should be defined<sup>1</sup> and the optimum procedures for finding gifted students, the underlying assumption is that gifted students exist as an objectively identifiable population, that they are "out there" and that the first step in serving this population is to "find them." There is a significant emphasis within the field on *identifying gifted students*. As questions have been raised concerning the validity of the identification measures used and the narrowness of the targeted population, more emphasis has been placed on "identifying the handicapped gifted," "identifying the bilingual gifted," and "identifying the underachieving gifted,"<sup>2</sup> but the focus is still on finding that population identified as gifted.

The impact of such a focus is to *reify* the concept of giftedness *per se*. The process of reification as it operates here involves shifting one's view away from seeing gifted children as a population identified largely in terms of a quantitatively assessed difference (IQ) toward a vision of these children as qualitatively different from other children. Such an orientation leads to another key assumption behind gifted education, that is, the "exclusivity" of the definition, and therefore the exclusivity of the policies and practices recommended.