

◆◆ Chapter 14

Dialogical Thinking: Critical Thought Essential to the Acquisition of Rational Knowledge and Passions

Abstract

Passions, Paul argues, can be rational or irrational. To become a rational person we must develop rational passions: "a passionate drive for clarity, accuracy, and fairmindedness, a fervor for getting to the bottom of things, to the deepest root issues, for listening sympathetically to opposition points of view, a compelling drive to seek out evidence, an intense aversion to contradiction, sloppy thinking, inconsistent application of standards, a devotion to truth as against self-interest." These emotional commitments are essential to the development of rationality, and only intensive dialogical and dialectical thinking over years will produce them. Paul develops this thesis at length in one of his most popular papers (Teaching Thinking Skills: Theory and Practice 1987).

We all have a natural tendency toward egocentricity — a tendency to assume our perspectives to be the only (or only plausible) one, to resist considering issues from the perspectives of others. This tendency is reinforced rather than combatted by approaches to problem-solving and critical thinking which are technical or monological in nature. Here, as elsewhere, Paul argues for the importance of teaching students the art of dialogical thinking. He notes that most "real-life" problems are multilogical in nature, and thus require consideration from multiple points of view.

The main thrust of the argument in this paper is pedagogical, in that, when students compare and defend multiple points of view on issues, exploring and testing them, they become more truly convinced of what they learn, and thus take that knowledge to heart. Even subjects which are, or can be seen to be, technical should be taught dialogically, since students need to reason back and forth between their own ideas about subjects (e.g., ideas about numbers or about the physical world) and the ideas being presented to them by their teacher, the textbook, or other students. Teaching all subjects through a dialogical approach, Paul emphasizes, encourages students to make their ideas explicit and to critique them, making their own ideas more sophisticated, rather than superimposing "inert school knowledge" upon "activated student ignorance". Students, in other words, need to reason their way to knowledge. Otherwise, their own deep-seated preconceptions will remain alive and ultimately displace what they passively "learned" in the classroom.

When psychologists concerned with cognitive psychology and problem solving want to test their theories, they choose different kinds of problems than those generally chosen by philosophers concerned with critical thinking and rationality. Cognitive psychologists like to analyze and generalize about problems defined, explored, and settled in a fundamentally self-

contained way. They prefer atomic problems, especially those having to do with technology, math, science, and engineering. Mathematical and verbal puzzles are a favorite. They choose problems that can be represented and settled in a definitive way within one frame of reference, for example,

1. A man once offended a fortune-teller by laughing at her predictions and saying that fortune telling was all nonsense. He offended her so much, in fact, that she cast a spell on him which turned him into both a compulsive gambler and, in addition, a consistent loser. That was pretty mean. We would expect the spell would shortly have turned him into a miserable, impoverished wreck. Instead, he soon married a wealthy businesswoman who took him to the casino every day, gave him money, and smiled happily as he lost it at the roulette table. They lived happily ever after. Why was the man's wife so happy to see him lose?
2. You are visiting a strange country in which there are just two kinds of people — truth tellers and liars. Truth tellers *always* tell the truth and liars *always* lie. You hail the first two people you meet and say, "Are you truth tellers or liars?" The first mumbles something you can't hear. The second says, "He says he is a truth teller. He is a truth teller and so am I." Can you trust the directions that these two may give you?
3. Ten full crates of walnuts weigh 410 pounds, whereas an empty crate weighs 10 pounds. How much do the walnuts alone weigh?
4. In how many days of the week does the third letter of the day's name immediately follow the first letter of the day's name in the alphabet?

I call these problems (adapted from Hayes, 1940) and the means by which they are solved *monological*. This implies that they are settled within one frame of reference with a definite set of logical moves. When the right set of moves is made, the problem is settled. The proposed answer or solution can be shown to be the "right" answer or solution by standards implicit in the frame of reference.

Philosophers concerned with critical thinking and rationality are drawn to a very different kind of problem. They tend to choose non-atomic problems, problems that are inextricably joined to other problems and form clusters, with some conceptual messiness about them and often important values lurking in the background. When the problems have an empirical dimension, that dimension tends to have a controversial scope. One must argue how the facts ought to be considered and interpreted and how to determine their significance. When they have a conceptual dimension, there tend to be arguably different ways to pin the concepts down.

Consequently, the problem's precise identification and definition depend upon some arguable choice among alternative frames of reference. I call these questions *multilogical*. More than one kind of incompatible logic can be advanced for their settlement. Indeed, more than one frame of reference can be used to argue their construal.

Since more than one frame of reference is contending for their construal and settlement, we must somehow "test" the frames of reference themselves. To test whole frames of reference without begging the question one must set the frames of reference against each other dialectically, and test the logical strength of one against the logical strength of the rest by appealing to standards not peculiar to any.

If we do not know how to make the case for an answer proposed from a contending frame of reference, we can find a proponent to make the case for it. Then we listen to the case made from a competing frame of reference. Most especially, we try to determine how successfully each constructed logic answers the objections framed from opposing perspectives. A trial by jury with opposing arguments of prosecution and defense illustrates a traditional approach to multilogical issues.

However, if no informed proponents of opposing points of view are available, we have to reconstruct the arguments ourselves. We must enter into the opposing points of view on our own and frame the dialogical exchange ourselves. I contend that this skill of empathy and reciprocity is essential to the development of the rational mind. Only such activity forces us outside our own frame of reference, which, given the primary nature of the human mind, tends to become an inflexible mind set. Unless we counter this tendency early on, it begins a process that becomes progressively harder to reverse.

Even though the lives of children are deeply involved in multilogical questions, and how children respond to these questions has a profound influence on how they later define and address the central issues they will face as adults, children rarely have a real opportunity in school to reflect upon these questions in mutually supportive dialogical settings. I have in mind questions *like* the following (although not necessarily these *precisely*):

Who am I? What am I like? What are the other people around me like? What are people of different backgrounds, religions, and nations like? How much am I like others? How much am I unlike them? What kind of a world do I live in? When should I trust? When should I distrust? What should I accept? What should I question? How should I understand my past, the past of parents, my ethnic group, my religion, my nation? Who are my friends? Who are my enemies? What is a friend? How am I like and unlike my enemy? What is most important to me? How should I live my life? What responsibilities do I have to others? What responsibilities do they have to me? What responsibilities do I have to my friends? Do I have any responsibilities to people I don't like? To people who don't like me? To my enemies? Do my parents love me? Do I love them? What is love? What is hate? What is indifference? Does it matter if others do not approve of me? When does it matter? When should I ignore what others think? What rights do I have? What rights should I give to others? What should I do if others do not respect my rights? Should I get what I want? Should I question what I want? Should I take what I want if I am strong enough or smart enough to get away with it? Who comes out ahead in this world, the strong or the good person? Is it worthwhile to be good? Are authorities good or just strong?

Questions like these underlie most of the satisfactions and frustrations of childhood. The deepest orientation of the person to self and life depends on how the individual responds to them.

◆ *Background Principles*

Before proceeding with my argument for the need for dialogical thinking to develop rational knowledge and passions, I would like to introduce the following background principles:

1. A reasonable person solves problems or settles questions about what to do or believe by adjusting his or her thinking to the nature of each question. Different questions require different modes of thinking. If a question's settlement presupposes the gathering of some empirical data, a reasonable person uses his or her thinking to facilitate that gathering. If that gathering requires examining sources arguing from more than one point of view, the person looks at multiple sources and listens to the case for more than one point of view. If reasonable doubts can be raised about the accuracy, relevance, completeness, or implications of these data, they raise them. If there are values or purposes implicit in the problem-solving activity that a reasonable person would clarify or question, he or she clarifies or questions them.
2. People have both a primary and a secondary nature. Our primary nature is spontaneous, egocentric, and strongly prone to irrational belief formation. It is the basis for our instinctual thought. People need no training to believe what they want to believe, what serves their immediate interests, what preserves their sense of personal comfort and righteousness, what minimizes their sense of inconsistency, and what presupposes their own correctness. People need no special training to believe what those around them believe, what their parents and friends believe, what they learn from religious and school authorities, what they often hear from or read in the media, and what is commonly believed in the nation in which they are raised. People need no training to think that those who disagree with them are wrong and probably prejudiced. People need no training to assume that their own most fundamental beliefs are self-evidently true or easily justified by evidence. People naturally and spontaneously identify with their own beliefs and experience most disagreement as personal attack, adopting as a result a defensiveness that minimizes their capacity to empathize with or enter into points of view other than their own.

On the other hand, people need extensive and systematic practice to develop their secondary nature, their implicit capacity to function rationally. They need extensive and systematic practice to recognize their tendencies to form irrational beliefs. They need extensive practice to develop a dislike of inconsistency, a love of clarity, a passion to seek reasons and evidence and to be fair to points of view other than their own. People need extensive

practice to recognize that they indeed have a point of view, that they live *inferentially*, that they do not have a direct pipeline to reality, that one can easily have an overwhelming inner sense of the correctness of one's views and still be wrong.

3. Instruction that does not further the development of human rationality, though it may properly be called training, is not *education*. The cultivation of the educated mind and person presupposes the cultivation of rational skills and passions. Insofar as schooling furthers, uses, or reinforces irrational belief formation, it violates its responsibility to *educate*. A society of uneducated persons is incompatible with democracy.

Unfortunately, the rule rather than the exception in schooling today is that students are continually encouraged to believe that there are more or less authoritative answers readily available for most of the important questions and decisions we face, or at least, authoritative frames of reference through which such answers can be pursued. Students are led to believe that they are surrounded by experts whose command of knowledge enables them to definitively settle the important issues they face socially and personally. Students tend to ego-identify with the monological answers of their parents, teachers, or peers. They have no real experience with dialogical thinking.

◆ *Most Important Issues of Everyday Life
Are Multilogical and Human*

We do not live in a disembodied world of objects and physical laws. Instead, we live in a humanly contrived and constructed world. And there is more than one way to contrive and construct the world. Not only our social relations but our inner cognitive and affective lives are inferential in nature. We do not deal with the world-in-itself but the the world-as-we-define-it in relation to our interests, perspective, and point of view. We shape our interests and point of view in the light of our sense of what significant others think, and so live in a world that is exceedingly narrow, static, and closed. To protect ourselves, we assume our view is moral and objective. For the most part, our viewpoints are in fact amoral and subjective. Consider Goffman's (1959) explanation.

In their capacity as performers, individuals will be concerned with maintaining the impression that they are living up to the many standards by which they and their products are judged. Because these standards are so numerous and so pervasive, the individuals who are performers dwell more than we might think in a moral world. But, *qua* performers, individuals are concerned not with the moral issue of realizing these standards, but with the amoral issue of engineering a convincing impression that these standards are being realized. Our activity, then, is largely concerned with moral matters, but as performers we do not have a moral concern with them. (p. 19)

This is not, as Whitehead (1929) shrewdly points out, how we *describe* ourselves,

It does not matter what men say in words, so long as their activities are controlled by settled instincts. The words may ultimately destroy the instincts. But until this has occurred, words do not count.

As young children we begin to internalize images and concepts of what we and others are like, of what, for example, Americans are like, of what atheists, Christians, communists, parents, children, business-people, farmers, liberals, conservatives, left-wingers, right-wingers, salespeople, foreigners, patriots, Palestinians, Kiwanis Club members, cheerleaders, politicians, Nazis, ballet dancers, terrorists, union leaders, guerrillas, freedom fighters, doctors, Marines, scientists, mathematicians, contractors, waitresses, are *like*. We then ego-identify with our conceptions, we assume them to be accurate, and spontaneously use them to guide our day-to-day decisions.

Unwittingly, we begin as children — and, unless we get extensive dialogical practice, we continue as adults — to use egocentric and self-serving theories of people and the world. We organize our experience and make judgments from the perspective of assumptions and theories we would not admit to having if questioned. Studies in social perception demonstrate this in detail. Toch and Smith (1968) summarize it as follows:

The process of reaching a value-judgment, the unconscious weighing that man's brain is able to make of numerous cues during a fraction of a second, is by no means a random and chaotic procedure. The weighing process, resulting in a perception, goes on for a purpose, whether that purpose is seeking food, adjusting one's footsteps to a curbing, picking up a book, reading or underlining certain passages in a book, joining some gang or group, or accepting or rejecting some political ideology. (p. 6)

We see people as instant wholes. A "theory" is commonly viewed as something used exclusively by scientists. The discussion, however, emphasizes that everyone has, and inevitably uses, theories about people. These theories guide the wholes they perceive and the parts that they fit into the wholes. (p. 10)

We all use theories in dealing with people: We invent concepts, assume relationships between them, and make predictions from our assumptions. Our theories are not, however, useful in the scientific sense, for they are implicit rather than explicit. That is, we are only dimly aware of our theories. As a result, we rarely make any real effort to test them. Yet they rule our impressions and our judgments. (p. 13)

People from different ethnic groups, religions, social classes, and cultural allegiances tend to form different but equally egocentric belief systems and use them equally unthinkingly. These different construals of the world represent alternative settlements of the same basic set of issues all people continually face. We must all decide who we are as individuals and members of a community. We must construct a history, a place in time. We must envision an emergent future. We must decide who our friends and enemies are. We must invest our time, energy, and resources in some projects and not others.

We must decide what is *ours* and *why* it is ours. We must decide what is just and unjust and what grievances and grudges we have. We must decide to whom to give and from whom to withhold credibility. We must decide what is possible and impossible, what to fear and what to hope for.

All of these decisions determine our fundamental life-style and, ultimately, our destiny. They all presuppose answers to multilogical issues. Yet few of us realize how we internalize and construct a logic, a point of view, an organized way of experiencing, reasoning, and judging. Most of us, unfortunately, think of the world in terms of a monological definition of reality. How we see things simply seems *the correct way* to see them. How others see them simply seems wrong or prejudiced.

This can be illustrated by the flagrant differences between the colonial and British perceptions of the so-called Boston Massacre. The accounts at the time testify to the way in which people automatically presuppose the correctness of their ethnocentric perceptions:

1. A colonial onlooker, standing 20 yards from the colonists, gave sworn testimony to the justices of the peace on April 23, 1775, that the British fired the first shot.
2. A colonial Tory (a sympathizer with the British) wrote on May 4, 1775, to General Gage (the British commander in Boston), that the colonists fired the first shot.
3. A young British lieutenant wrote in his diary on April 19, 1775, that the colonists fired one or two shots, then the British returned the fire without any orders.
4. The commander of the colonial militia, John Parker, in an official deposition on April 25, 1775, said that he ordered the militia to disperse and not to fire, but the British fired on them without any provocation.
5. The *London Gazette* stated on June 10, 1775, to its British readers that the colonists fired on the British troops first.

Most teachers, I suspect, simply assume the account that favors their nation and then teach it as fact. Thus, students are taught to think monologically about historical events.

Consequently, most students (and their teachers) fail to grasp the essentially multilogical character of history. Since they don't see that all history is history-from-a-point-of-view, students fail to recognize appropriate logical parallels, for example, that all news is news-from-a-point-of-view. The result is that students do not learn how to read history or the news critically.

◆ *Inert Knowledge and Activated Ignorance*

Whitehead described the problem of inert knowledge — knowledge that we in some sense *have* but do not use when logically relevant, knowledge that just sits there in our minds, as it were, without activating force. Typically, this

inability to put knowledge to work is viewed as an inability to *transfer*. In light of the above, I suggest instead that the problem is mainly due to our already having *activated* beliefs firmly entrenched in instinctual egocentric thinking.

The young child does not come to school with an empty head ready to be filled with new ideas and knowledge. The egocentric mind abhors a vacuum. The capacity to suspend judgment pending evidence is a higher order, secondary-nature, skill. The problem of inert knowledge is equivalent to the problem of *activated ignorance*. Children do not *transfer* the knowledge they learn in school to new settings because they already have activated ideas and beliefs to use in those settings.

The child's own emerging egocentric conceptions of children, teachers, parents, fun, work, play, and the physical world are much more activated and real than any alternative conceptions fostered by classroom instruction or textbooks. Only by bringing out the child's own ideas in dialogical and dialectical settings can the child begin to reconstruct and progressively transcend these conceptions. As long as school learning is simply superimposed on top of the child's own activated ignorance, that ignorance will continue to rule in the life-world of the child; scholastic learning will remain largely inert. Perhaps this is partly why so many adults, including those in high positions, often seem to act or talk like egocentric children.

There are, therefore, at least two fundamental justifications for giving children extensive dialogical practice in school: 1) such practice is essential for all of the intrinsically multi-logical issues that the child must face, and 2) such practice is essential for the child to come to discover, reconstruct, and ultimately transcend those ideas and beliefs uncritically and unconsciously internalized. A case can be made for the value of dialogical reasoning even with monological issues, as will be shown by the work of Jack Easley on math and science education. But first, let me be more explicit about the nature of dialogical thinking.

◆ *Dialogical Thinking in Early School Years*

Children begin developing an egocentric identity, point of view, and frame of reference through which they experience, think about, and judge the world. Many of their beliefs come from those around them. Nevertheless, from their earliest days, they come up against opposing points of view, differing interpretations of events, contradictory judgments, and incompatible lines of reasoning. First their parents and peers, later their teachers and other authorities, often disagree with them and thwart their egocentric desires.

But instruction does little to provide children with a way of entering into thoughts and feelings other than their own. Of course, they *hear* what others say, but they do not experience the inner logic of alternative points of view. That children can develop in this direction is demonstrated in their play: "You can be the mommy. I'll be the daddy. And my sister can be

the baby." But schools do not, by and large, take advantage of this tendency and use it to construct exercises wherein students present reasons and evidence for alternative conclusions.

Children often use their capacity to think up reasons for and against an idea or decision only when they are already egocentrically for or against it. Of course, they must often bow to the superior power or authority of a parent, teacher, or older peer. But they rarely do so by entering into the point of view of the other and rationally assenting to it. As a result, they do not grasp that they themselves have a point of view. Rather, they tend to make absolute moral judgments about themselves and others. They frequently develop hostile feelings (often repressed) toward themselves or toward those who force them, rightly or wrongly, to accept their point of view. They do not have an opportunity to work out their own thoughts and discover ways of judging *reasons* without judging the *worth of the person* advancing them.

Children need assignments in multilogical issues. They need to discover opposing points of view in nonthreatening situations. They need to put their ideas into words, advance conclusions, and justify them. They need to discover their own assumptions and those of others. They need to discover their own inconsistencies and those of others. They do this best when they learn how to role-play the thinking of others, advance conclusions other than their own, and construct reasons supporting them.

Children need to do this for the multilogical issues — the conflicting points of view, interpretations, and conclusions — that they inevitably face in their everyday lives. But perhaps we should go further. All or most of what we learn rationally requires dialogical exchanges and opportunities to judge between conflicting points of view. The work of Jack Easley on math and science education suggests this thesis.

◆ *Should Dialogical Instruction Be Used for Monological Issues?*

In a series of articles on mathematics and science education, Jack Easley (1983a, b; 1984a) argues that children should learn how to solve virtually all problems — even the most monological and formalistic ones — dialogically or dialectically. He argues that studies indicate that primary school teachers 1) cannot *transmit* knowledge, 2) should therefore leave most discussion of math and science content to pupils, 3) should choose and present appropriately challenging problems and tasks to the pupils, 4) should train group leaders to facilitate dialogical exchanges, and 5) should serve, fundamentally, as moderators of class communication. Most important, children should work in small but heterogeneous groups, trying to convince and understand each other. Through arguing, children discover their own views' strengths and weaknesses and also discover contrasts between their views and the views of others. Here are some of the ways Easley (1984b) formulates these points:

Primary teachers in the U.S., at least, should leave most discussion of mathematics and physical science content to their pupils. *a)* Cognitive research shows that young children develop and test alternative rational explanations which authoritative exposition can't displace. *b)* The conflicts that arise between presentations by teachers and texts and the pupil's unexamined math-science concepts generate severe anxieties about mathematics and science in most children....

Only by reflection on the alternative schemes in the light of conflicts with standard schemes can revisions be produced....

Those few students who do truly master mathematical or scientific subjects do so through a long process of doubting and challenging authority which few teachers are willing to take the time to do, even in pre-service training....

Teachers of regular primary grade classes should train group leaders on a regular basis to provide appropriate challenges for every member of their group....

Primary children should strive first to develop expression in some form by working in heterogeneous groups, trying to convince each other by clear speaking and writing....

They should also learn to say in advance what kind of contribution to the dialogue they are trying to make: an objection, an alternative view, a supporting point, etc....

I became convinced that teachers should be accepted by school reformers as the persons who are effectively in charge of instruction and who can change only as their perceptions of the classroom context are opened up through dialogues which respect the perceptions they have built from their own experience....

In Kitamaeno School, use of peer group dialogues helped children recognize alternative schemes and deal with them. Organizing children into small working groups around pre-selected appropriately challenging tasks required group leaders with confidence and some training in what to do when things went wrong....

The teachers' role was to present, often very dramatically, the challenging problem they had selected for the lesson, and almost totally abstaining from demonstrating or explaining how to solve it and to serve as master of ceremonies to see that every child had ample opportunity to be heard and took the responsibility to express ideas and to listen critically to those of others....

As children discover they have different solutions, different methods, different frameworks, and they try to convince each other, or at least to understand each other, they revise their understanding in many small but important ways....

As you can see, Easley argues that, irrespective of whether we have a precise and thoroughly defensible monological system for settling certain types of problems, children must work their way to that mono-logic through dialogic. Since students have alternative beliefs and frames of reference, even regarding scientific and mathematical concepts, they need to confront them or they will remain implicit, unchallenged, and unreconstructed. If we do not provide an environment for children to discover their own *activated* ideas, they may become and remain invincibly ignorant when it comes to putting

knowledge into action. Their biases, stereotypes, distortions, illusions, and misconceptions will not dissolve without the purging power of dialogical exchange. They will simply superimpose adult beliefs on top of unreconstructed but still highly activated infantile ones.

Students leave school not only with unreconstructed mathematical and physical ideas but with unreconstructed personal, social, moral, historical, economic, and political views. Students leave school not knowing what they *really* — that is *deeply* — believe. Students leave school with much inert knowledge and even more activated ignorance. Therefore, students do not understand how to write, think, or speak in ways that organize and express what they believe, or read or listen in ways that allow them to understand and assess the thought of another. Students do not know how they respond to the mass media and to what extent it reinforces their subconscious egocentric or sociocentric views. They do not grasp how to read a newspaper or a book critically or how to listen to a lecture critically. They have no *rational* passions. They feel deeply only about egocentric concerns, justifying getting what they want and avoiding what they do not want. If dialogical thinking enables students to reconstruct mathematical and scientific ideas, it is most certainly called for on personal, social, moral, historical, economic, and political ones.

◆ *Dialogical Thinking as a Strategy
for Breaking Down Egocentric Identifications
and Mind Sets*

Children must experience dialogical thinking because such thinking is essential for rationally approaching the most significant and pervasive everyday human problems, and without it they will not develop the intellectual tools essential for confronting their own instinctual egocentric thought. Until we discover our own egocentric thinking, we cannot monitor or work through it. Indeed, to hold beliefs egocentrically is to hold them in non-testable ways. As Piaget (1976) puts it:

Many adults are still egocentric in their ways of thinking. Such people interpose between themselves and reality an imaginary or mystical world, and they reduce everything to this individual point of view. Unadapted to ordinary conditions, they seem to be immersed in an inner life that is all the more intense. Does this make them conscious of themselves? Does egocentrism point the way to a truer introspection? On the contrary, it can easily be seen that there is a way of living in oneself that develops a great wealth of inexpressible feelings, of personal images and schemas, while at the same time it impoverishes analysis and consciousness of self. (p. 209)

Like egocentric children, egocentric adults assimilate everything they hear or experience to their own point of view. They learn how to affect reciprocity — to create the appearance of entering into points of view other than their own. But when there is conflict, they “enter” them only to negate or refute. They never genuinely leave their own mind set.

I am reminded of a distinction drawn by the sociologist, C. Wright Mills (1962), illuminating how people relate to their belief systems. Mills argued that there were three types of believers — vulgar, sophisticated, and “plain” (critical). Vulgar believers can only operate with slogans and stereotypes within a point of view with which they egocentrically identify. Vulgar Marxists use slogans like “Power to the people!” “Smash the state!” “Down with the capitalist pigs!” to badger their would-be opponents. They are not interested in reading books on capitalism or by capitalists, but consider them only as the enemy.

In contrast, sophisticated Marxists do read books on capitalism or by capitalists only to refute them. They stand on their heads if necessary to show that Marxism is in all senses and respects superior to capitalism. They might be intellectually creative, but they use their creativity to further one and only one point of view.

Only critical believers would, in Mills’s sense, enter sympathetically into opposing points of view, for only they recognize weaknesses in their own. If they become Marxists, it is because they read Marx as Marx read others — sympathetically and critically. They learn from criticism and are not egocentrically attached to their point of view. They understand they must continually develop and refine it by a fuller and richer consideration of the available evidence and reasoning, through exposure to the best thinking in alternative points of view.

If Mills is right, we also have vulgar, sophisticated, and critical capitalists; vulgar, sophisticated, and critical Christians; vulgar, sophisticated, and critical North Americans, Frenchmen, and Soviets; vulgar, sophisticated, and critical Freudians, and so on. Given their fundamental mode of thinking, their shared capacity to enter into points of view other than their own and to learn from criticism, critical Marxists, capitalists, Christians, Muslims, North Americans, Frenchmen, Soviets, Freudians, and Skinnerians share more in common with each other than they do with their vulgar or sophisticated counterparts.

A fundamental problem of schooling today is that schools in all societies tend to produce vulgar and sophisticated, rather than critical, believers. This problem is mainly due to the lack of dialogical thinking. Most instruction is monological, with various *authoritative* perspectives being nurtured and inculcated. When the inculcated perspective is incompatible with the child’s egocentric beliefs, the academically learned perspective is simply superimposed as a facade or veneer. This veneer may itself be egocentrically defended, but the defense is merely *verbal*, because the primary and more primitive system is maintained in behavior. Hence, people can vehemently defend Christianity and yet continually behave in a most un-Christian fashion, apparently and self-righteously oblivious to their contradictions. Or they can defend democracy with passion and abandon, and yet act to undermine all possibility of its being practiced. This is true of any system of beliefs, whether scientific, religious, social, political, or personal. Wherever we find people, we find blatant contradictions between word and deed. Wherever we find people, we find a great deal of ego-defensive self-delusion.

◆ *Teaching Critical Thinking in the
Strong Sense: School as Purgatory*

I would like to use a religious metaphor to characterize the problem of education. For a Catholic, there are three possible divine dispensations as a result of how one lives. In addition to heaven or hell, one may be sent to purgatory, a place in which one must work one's way back to God. The assumption is that one can die with one's thoughts and will still somewhat resistant to God. One then must go through a process of purging one's sinful tendencies. This process involves some pain and struggle, but issues ultimately in a purification of heart and will, a rooting out of one's sinful tendencies, and a reconstruction of one's inner thought.

This concept is apt for understanding what schooling would be if we were to cultivate that very rare breed — the educated, rational person. If we want persons who believe critically, who are neither vulgar nor sophisticated in their beliefs, then we waste our time by trying to make school heaven — all fun and games, all pleasant and satisfying, all positive reinforcement, all sweetness and light, with no confusion, struggle, or dispute. Of course, I take it for granted that we will get nowhere by going to the other extreme and making it hell. The challenge is to foster a process whereby students progressively and over a long period of time rid themselves of their egocentric and sociocentric beliefs and attachments. Presently, it appears that schooling does little more than make people's instinctual egocentrism a bit more sophisticated, at least with respect to those issues, that involve our collective egos.

However, this does not mean that schools that foster dialogical or dialectical thinking would be hotbeds of strident argument, closedminded debate, or personal trauma. Our experience of argument, debate, and controversy occurs now in the context of unreconstituted egocentric attachment. People now typically argue for egocentric purposes and with egocentric ends in view. They argue now to score points, *defeat* the other person, make their point of view *look* good. They experience "argument" as *battle*, not as a mutual or cooperative search for a fuller understanding.

Yet I know from years of working with students that they *can* learn to reason dialogically in mutually supportive ways, that they can learn to experience dialogical thought as leading to discovery, not victory. To achieve this end we must first ensure that, as soon as possible, they learn to argue for and against each and every important point of view and each basic belief or conclusion that they are to take seriously. We must also raise issues that they care about and which engage their egocentric thoughts and beliefs. We should begin with beliefs that are mildly egocentric and work slowly to those that are deeply embedded in the ego. Then the dialogical thinking we nurture helps develop critical thinking in the strong sense.

Teaching critical thinking in the strong sense means teaching so that students explicate, understand, and critique their own deepest prejudices, biases, and misconceptions, thereby encouraging students to discover and contest

their own egocentric and sociocentric tendencies. Only if we experientially contest our inevitable egocentric and sociocentric habits of thought can we hope to genuinely think rationally. Only dialogical thinking about basic issues that matter to the individual provides the kind of practice and skill essential to strong-sense critical thinking. I grant that every student needs to develop the particular skills that Robert Ennis and others have delineated, but I am arguing that *how* these skills are nurtured is crucial.

Students need to develop all critical thinking skills in dialogical settings to develop ethically, rationally, that is, to develop genuine fairmindedness. If simply taught as atomic skills apart from empathically entering into points of view students fear or dislike, critical thinking will in the end simply be used to rationalize prejudices and preconceptions, or convince people that their point of view is *the* correct one. Students will then merely be transformed from vulgar to sophisticated, but not to *critical* thinkers.

◆ *Fact, Opinion, and Reasoned Judgment*

Unfortunately, many programs designed to enhance critical thinking fail to give students insight into the nature of multilogical issues and the need for dialogical thinking. They often teach as if all questions are reducible either to matters of fact (where science, math, engineering, and technical learning are dominant) or matters of opinion (where personal taste, culture, religion, preference, and faith are dominant). This happens when students are told to divide beliefs or statements into facts and opinions. Neither category allows dialogical thinking. It is presumably unnecessary with facts, because scientific, mathematical, and technological procedures and methods presuppose relatively agreed-upon frames of reference and modes of issue settlement. It is useless with opinions, because presumably one cannot reason in matters of pure taste: *De gustibus non est disputandum*. Schools under the sway of this view take as their first and foremost responsibility teaching students *the facts*, and then secondarily, passing on the shared values and beliefs of the culture.

Unfortunately, a taxonomy that divides all beliefs into either facts or opinions leaves out the most important category: *reasoned judgment*. Most important issues are not simply matters of fact, nor are they essentially matters of faith, taste, or preference. They call for our reasoned judgment. They can be understood from different points of view through different frames of reference. People approach them with different assumptions, concepts, priorities, and ends in view. When analytically applied to these perspectives in dialectical contexts, the tools of critical thinking enable us to grasp genuine weaknesses. The dialectical experience enables us to gain this perspective.

For example, it is exceedingly difficult to judge the case made by a prosecutor in a trial *until* we have heard the arguments for the defense. Only by stepping out of the perspective of the prosecutor and actually organizing the

evidence in language designed to make the strongest case for the defense, can we begin to grasp the true strength and weakness of the prosecutor's case. This approach is the only proper way to approach the important issues we face in our lives, and I am amazed that we and our textbooks refuse to recognize it. The most basic issues simply do not reduce to unadulterated fact or arbitrary opinion. True, they often have a factual dimension. But often some of the alleged facts are questionable. And we often must decide which facts are *most* important, which should be made central, and which should be deemed peripheral or even irrelevant. Then, typically, there are alternative arguable interpretations and implications. Make your own list of the ten most important issues and see if this is not true (but beware of the tendency to see your own answers to these issues as self-evident facts!).

◆ *The Cultivation of Rational Passions*

To grasp the problem of teaching critical thinking skills in a strong sense, we must challenge the reason-versus-emotion stereotype, which fosters the view that a rational person is cold, unfeeling, and generally without passion, whereas an irrational person is passionate but unintellectual. A false dichotomy is set up between reason and passion, and we are forced to choose between the two as incompatible opposites.

But this point of view is profoundly misleading. All action requires the marshaling of energy. All action presupposes a driving force. We must *care* about something to do something about it. Emotions, feelings, and passions of some kind or other underlie all human behavior. What we should want to free ourselves from is not emotion, feeling, or passion *per se*, but irrational emotions, irrational feelings, and irrational passions. A highly developed intellect can be used for good or ill either at the service of rational or irrational passions. Only the development of rational passions can prevent our intelligence from becoming the tool of our egocentric emotions and the point of view embedded in them. A passionate drive for clarity, accuracy, and fairmindedness, a fervor for getting to the bottom of things, to the deepest root issues, for listening sympathetically to opposition points of view, a compelling drive to seek out evidence, an intensive aversion to contradiction, sloppy thinking, inconsistent application of standards, a devotion to truth as against self-interest — these are essential commitments of the rational person. They enable us to assent rationally to a belief even when it is ridiculed by others, to question what is passionately believed and socially sanctioned, to conquer the fear of abandoning a long and deeply held belief. There is nothing passive, bland, or complacent about such a person.

Emotions and beliefs are always inseparably wedded together. When we describe ourselves as driven by irrational emotions, we are also driven by the irrational *beliefs* that structure and support them. When we conquer an irrational emotion through the use of our reason, we do it by using our ratio-

nal passions. To put this another way and link it more explicitly with the earlier sections of this chapter, our primary egocentric nature is a complex mixture of belief, values, drives, and assumptions. It is an integrated cognitive and affective system. It generates a total frame of reference through which we can come to perceive, think, and judge. When we develop our secondary nature, we develop a countervailing system, equally complex and complete. We may of course experience intense internal struggles between these incompatible modes of being. Both systems can become highly *intellectualized* so that intelligence per se is not what distinguishes them. It is quite possible to find highly intelligent but essentially irrational persons, as well as basically rational ones of limited intelligence. In this way, a highly intelligent but sophisticated (i.e., sophistic) thinker can create the illusion of defending a more rational point of view than that defended by a thinker who is basically rational but not as clever.

Therefore, as educators we should embrace the nurturing of rational passions as an essential dimension in the development of the *thinking* of our students. Teachers must model rational passions. This, of course, presupposes that teachers genuinely have them. It will do no good for a teacher to pretend. This is not a matter of *technique*. This is an important reason why successful critical thinking instruction cannot be achieved as the result of a few weekend in-service workshops.

◆ *Critical and Creative Thinking*

Just as it is misleading to talk of developing a student's capacity to think critically without facing the problem of cultivating the student's rational passions — the necessary driving force behind the rational use of all critical thinking skills — so too is it misleading to talk of developing a student's ability to think critically as something separate from the student's ability to think creatively. All rational dialogical thinking requires creativity, because dialogical thinking is a series of reciprocal creative acts wherein we move up and back between categorically different imagined roles. We must first of all imagine ourselves in a given frame of reference. Then we must imaginatively construct some reasons to support it. Next we must step outside it and imagine ourselves responding to those reasons from an opposing point of view. Then we must imagine ourselves back in the first point of view to respond to the opposition we just created. Next we must change roles again and create a further response, and so on. The imagination and its creative powers are continually called forth. Each act must fit the unique move preceding it. In dialogical exchange, we cannot predict in advance what another, or indeed what we, will say. Yet what we say, to be rational, must respond to the logic of what the other just said. Furthermore, integrating the strengths of opposing views, and eliminating weak points are also creative and constructive acts. One must creatively develop a new point of view.

Students need not begin by playing both sides of a dialogue simultaneously. But we should continually nurture their ability to frame dialogical exchanges, first brief, then extended ones. Their creative imagination will be continually challenged to develop through this process.

◆ *Conclusion*

People become educated, as opposed to trained, insofar as they achieve a grasp of critical principles and the ability and passion to choose, organize, and shape their own ideas and living beliefs by means of them. Education is not merely piling up more and more bits and pieces of information. It is a process of autonomously distinguishing true from false. It calls for self-motivated action on our own mental nature and active participation in forming our own character. It requires us to learn to open our mind, correct and refine it, and enable it to learn rationally, thereby empowering it to analyze, digest, master, and rule its own knowledge, gain command over its own faculties, and achieve flexibility, fairmindedness, and critical exactness.

This process cannot be accomplished when learning is viewed monologically. The process of gaining knowledge is at its roots dialogical. Our minds are never empty of beliefs and never without a point of view. They cannot function framelessly. Since our instinctive intellectual drives are initially egocentric, and then typically ethnocentric, we must learn to bring our implicit ideas and reasonings into open dialogical conflict with opposing ones to decide rationally, as best we can, upon their merit as candidates for mindful belief. Our implicit everyday theories of ourselves, our friends and neighbors, our nation and religion, our enemies and antagonists, and our hopes, fears, and premonitions must become overtly known to us that we might learn to continually re-assess them as we enter empathically into more or less alien belief systems.

Children begin by engaging in mere collective monologue, but early on they also begin to respond to the points of view of others. Their play suggests that they enjoy taking on the role of others and acting as though they were someone else. This initial drive must not be allowed to wither away, but must be cultivated, expanded, and reshaped. Whether we begin with empathy into the thinking and predicaments of characters in children's stories, lead children into reflective philosophical discussions, or provide challenging ethical questions and dilemmas for them to think about, we must lead students to the point that they begin to get comfortable dealing with dialogical issues rationally. Progressively, the issues that students deal with should get more and more complex.

Baby Bear had the smallest bowl.
 “Why do I have the smallest bowl?” he said.
 “Because you are the smallest bear.” said his mother.
 “Is that fair?” said Baby Bear.

- *Did Baby Bear need as much as the big bears? Why?*
- *Could he eat as much as the big bears? Why?*
- *Did he deserve as much as the big bears? Why?*
- *Do you think it is fair for Baby Bear to have a smaller bowl? Why?*
- *What problems have you seen like the one in this story?*

figure 1

Discussion Plan: Friends

1. Can people talk together a lot and still not be friends?
2. Can people hardly ever talk together and still be friends?
3. Are there some people who always fight with their friends?
4. Are there some people who never fight with their friends?
5. Are there some people who have no friends?
6. Are there people who have friends, even though they have hardly anything else?
7. Do you trust your friends more than anyone else?
8. Are there some people whom you trust more than your friend?
9. Is it possible to be afraid of a friend?
10. What is the difference between friends and family?
11. Are there animals you could be friends with, and other animals you could never be friends with?

figure 2

WHAT DID SARA LEARN?

Making Things Right

The children had damaged the wall. Sara thought they should *make things right*. One way was for them to put a new coat of paint on the wall.

The children's parents might have to pay to have new paint put on the wall. Sara thought that might be another way to *make things right*.

- *What would be fair? Why?*
- *What problems like this have you seen?*
- *What does MAKING THINGS RIGHT have to do with being fair?*

figure 3

For each of the following issues, identify reasons that support each side of the issue.

Issue

Students' grades should be based not only on how much they learn, but also on how hard they try.

Students' grades should be based only on how much they learn.

Supporting Reasons

- 1. This policy will encourage students who learn slowly.
- 2. _____
- 3. _____

Supporting Reasons

- 1. Teachers don't always know how hard a student is trying.
- 2. _____
- 3. _____

Issue

The best way to deal with crime is to give long prison sentences.

Long prison sentences will not reduce crime.

Supporting Reasons

- 1. _____
- 2. _____
- 3. _____

Supporting Reasons

- 1. _____
- 2. _____
- 3. _____

figure 4

"If a man destroy the eye of another, they shall destroy his eye."

Hammurabi, about 1950 B.C.

Convicted of theft, Mustafa was taken into the public square where, before a fascinated crowd, the executioner chopped off his right hand with a sword.

The court ordered Sarah to pay \$5,500 for damages to Paul's car and \$8,376 in medical bills for injuries to Paul after she crashed into his car while he was stopped for a red light.

Three members of a teen-aged gang beat and robbed a 60-year-old woman standing at a bus stop. The woman was hospitalized for two months and permanently crippled by the beating. The boys were arrested and placed in Juvenile Hall for six months where they were given psychological counseling, released, and placed on probation for one year.

Each of the above situations involves an issue of *corrective justice*. Corrective justice refers to the fairness of responses to wrongs or injuries.

What Do You Think?

- 1. What is fair or unfair about each of the above responses to wrongs or injuries?
- 2. What values and interests, other than fairness, might be important to take into account in deciding what might be a proper response to a wrong or injury?

figure 5

More and more, students should have assignments that challenge their ability to identify and analyze frames of reference and points of view — the frames of reference in their texts, various subject areas, TV programs, news broadcasts and daily papers, the language of their peers and teachers, political speeches and personal discussions, and everyday decisions and ways of living. And they should do this to discover, not that everything is relative and arbitrary, or a matter of opinion, but that all beliefs and points of view are subject to rational analysis and assessment. As they achieve increasing success in this process, their rational passions will develop by degrees and their egocentric defensiveness will concomitantly decrease.

Students will not become progressively more unruly and hard to handle. On the contrary, they will become more and more amenable to reason and the power of evidence. They will, of course, eventually question us and our points of view, but they will do so rationally and hence help us to develop as well. Ideally, the process will pervade the school climate and be reflected in the deepest structures of school life. By this means, schools can perhaps begin to become leading institutions in society, paradigms of rationality, by helping an irrational society become what it itself has said is its own highest goal: a free society of free and autonomous persons.

◆ References

- Easley, Jack. (1983a). "A Japanese Approach to Arithmetic," in *For the Learning of Mathematics*, 3 (3).
- Easley, Jack. (1983b). "What's there to Talk About in Arithmetic?" in *Problem Solving* (Newsletter, The Franklin Institute Press) 5.
- Easley, Jack. (1984a). "Is there Educative Power in Students' Alternative Frameworks?" in *Problem Solving* (Newsletter, The Franklin Institute Press), 6:1–4.
- Easley, Jack. (1984b). "A Teacher Educator's Perspective on Students and Teachers' Schemes: Or Teaching by Listening." Unpublished paper, presented at the Conference on Thinking, Harvard Graduate School of Education.
- Goffman, Erving. (1959). *The Presentation of Self in Everyday Life*. Garden City, N.J.: Doubleday.
- Hayes, J. (1940). *The Complete Problem Solver*. Philadelphia: The Franklin Institute Press.
- Mills, C. Wright. (1962). *The Marxists*. New York: Dell.
- Piaget, Jean. (1976). *Judgment and Reasoning in the Child*. Totowa, N.J.: Littlefield, Adams.
- Toch, H., & Smith, H. C. (Eds.). (1968). *Social Perception*. New York: Van Nostrand.
- Whitehead, Alfred. (1929). *The Aims of Education and Other Essays*. New York: Dutton.
- * Figures 1, 3, and 5 are from *Justice*, a series produced by *Law in a Free Society*, 5115 Douglas Fir Drive, Calabasas, CA 91302. Figure 2 is from *Pixie: Looking for Meaning*, by Matthew Lipman, in *Philosophy for Children*, Institute for the Advancement of Philosophy for Children, Montclair State College, Montclair, N.J. Figure 4 is from *Thinking Critically*, by John Chaffee, 1985, Houghton Mifflin, Boston.