Introduction to the Second Edition

If there is any institution that can legitimately claim to be worldwide, it is probably the school. However different the cultures may be, the schools resemble one another remarkably. The system of education they provide is founded on the presupposition that children go to school to learn. They learn basic skills, like reading, writing, and arithmetic proficiencies. And they learn content, like geography, history, and literature.

A cynical commentator once observed that human beings invented speech in order to conceal their thoughts. The same observer might have added that they send their children to school to learn in order to keep them from thinking. If so, it is a tactic that has had only limited success. Children are not easily prevented from thinking. Indeed, it is often the case that our most cherished recollections of our school years are of those moments when we thought for ourselves – not, of course, because of the educational system, but in spite of it.

Yet there has always been a strand of educational thought that held that the strengthening of the child's thinking should be the chief business of the schools and not just an incidental outcome – if it happened at all. Some have argued in this way because they thought that the schooling of future citizens in democracy entailed getting them to be reasonable and that this could be done by fostering children's reasoning and judgment. Others have argued in this way because they saw their social systems – particularly the economic, bureaucratic, and

legal systems – congealing into rationality, and it was by fostering children's rationality that the schools could best prepare children for the world they would face when they grew up. And still others have contended that helping children to think well and think for themselves is required not just for reasons of social utility but because children have the right to receive nothing less.

Since the mid-1970s, the proponents of thinking in the schools (and colleges) have become distinctly more numerous and more vocal. The banner they have unfurled is emblazoned with the phrase "critical thinking," and although neither they nor those who oppose them are very clear about just what critical thinking entails, the hue and cry continues to mount. This awareness among educators that something has to be done to improve the quality of thinking in the classroom has prevailed until now.

What constitutes thinking? To this expert, good thinking is accurate, consistent, and coherent thinking; to that one, it is ampliative, imaginative, creative thinking. This scholar points to examples of good thinking in literature; that one points to instances of it in the history of science or conceives of it as the employment of scientific methodology. One philosopher hails it for its embodying logic and rationality; another, because it embodies deliberation and judgment. One educator acclaims it for helping us decide what to believe; another argues that belief decisions are out of place in a school context and that the teacher should aim at helping students discover only what they have sufficient evidence for asserting.

Amid the confusion, school administrators have to make decisions about how they are going to upgrade the educational offerings in their schools, about whether or not teachers should be retrained and, if so, about what approach should be employed. To make such decisions, they will need to be guided by definitions that clearly indicate just what a significant improvement of thinking is and how it can be made operational. They need to determine by what criteria teachers and researchers can decide whether or not such operationalization has been successful.

Thinking in Education has been proposed as a step in this direction. It does not claim to be definitive, but it does try to raise a few of the questions that need to be raised and to supply some of the answers

that can be provided at this very early stage in the development of a thinking-oriented educational process.

Thinking in Education makes no claim to being a work of specialized scholarship. Nor does it claim to be impartial and nonjudgmental. It regards the capacity of philosophy, *when properly reconstructed and properly taught*, to bring about a significant improvement of thinking in education. The case for this claim has not yet been made; the present study can be regarded as a kind of prologue to the making of such a case.

There is a second important (though not final) claim to be made in *Thinking in Education*, which is that the pedagogy of the "community of inquiry" should be the methodology for the teaching of critical thinking, whether or not a philosophical version of it is being employed. A third claim is that it is no accident that critical thinking is affiliated with such cognate terms as "criticism" and "criteria." These terms have to do with reasoning, evaluation, and judgment, and these in turn have to do with the improvement of thinking in which students are being encouraged to engage. Insofar as judgment is an art, the community of inquiry provides an environment in which it can be practiced and acquired. Spinoza was being unduly grim when he remarked that everything excellent is as difficult as it is rare. We have to create a society in which excellence flourishes in diversity and abundance. Upgrading the reflective element in education is a reasonable place to begin.

Throughout the past decade, efforts were made to introduce "thinking skills" into schools in which the acquisition of education had hitherto been equated with the acquisition of information. According to the earlier rhetoric prevailing in state departments of education and local boards of education, these efforts were making progress, and students could be said to be acquiring "knowledge," or, to use an even headier term, "understanding." But these were traditional conceptions of the aims of education, and what we were now told was happening was that the schools everywhere were engaged in equipping their students with "critical thinking." The arrival of the millennium seemed to be right on schedule. "Critical thinking" was the watchword for what the better teachers supposedly taught in the better schools. So ran one account. According to another, "critical

thinking" was characteristic of the sharper students, whether or not as a result of their having been taught to think that way. Some students are just naturally clear thinkers, it was said. What was to be done with the others was not quite evident.

In some respects the situation was a puzzling one. The last decade of the twentieth century was expected to be one of a gathering of momentum by the critical thinking movement. There would be more textbooks devoted to the topic, to be used by college undergraduates as well as by teachers-in-preparation. There would be more national and international conferences devoted to critical thinking, argumentation, informal logic, and "cooperative learning." There would be more degree programs in critical thinking, more minicourses in the subject for teachers looking for in-service credits, more philosophers and educational psychologists devoting themselves to expanding the scholarly side of critical thinking by strengthening its claims to be a discipline. The fact is that some of these things have been happening but others have not. The great conferences on thinking and its educational possibilities are no longer prevalent. The journals that once flourished by exploring the many facets of this latest of educational paradigms were now struggling, in what had been the most prosperous of decades, to keep from going under. The university-based academics, whose fledgling interest in matters of educational significance had been expected to grow stronger year by year, were instead, in increasing numbers, turning their backs on opportunities to contribute to the strengthening of the theoretical framework of the critical thinking movement. Not even the historical scholars were now devoting time to examining the undoubtedly genuine credentials of the important history of that movement, and without such an examination, critical thinking's claims to be a discipline can hardly be persuasive.

Still, this bleak account fails to give the whole picture. Publishers *are* putting out more and more textbooks in critical thinking. Teachers *are* being required to devote a portion of their time to in-service enrichment courses, and among these, critical thinking courses appear to be very popular. The trendy educational newspapers and periodicals, like *Educational Leadership*, which devoted much space to teaching for thinking in the 1970s and 1980s, but then pulled back in the 1990s, are now beginning to show signs of renewed interest in the

topic and perhaps even of a renewed sense of responsibility for the outcome. Everywhere there seem to be signs – no doubt feeble in many cases – of a certain degree of *institutionalization* of critical thinking in the schools. Perhaps this is all we could have hoped for, given the circumstances. This is what happens to educational fads that are considered successful: They come to be taken for granted, although at a fairly low level of efficiency.

For the vast majority of elementary school students, critical thinking has not fulfilled its promise. To be sure, more promises were made for it than it could possibly keep. But there were a number of deficiencies that doomed it from the start:

1. The critical thinking approach was, by itself, narrow and skimpy. It needed to be based much more solidly on informal logic, formal logic, educational psychology, developmental psychology, and philosophy, but this was seldom done.
2. Even where some instruction in these areas was provided, teacher preparation was insufficient.
3. Little effort was made to devise, as part of the approach, a creative thinking component that would engage students in imaginative thinking, and in thinking about the imagination.
4. Likewise, no serious effort was mounted to construct a valuational component, in which students would be able to talk together freely about the different sorts of values, and how they were to be appreciated.
5. Not only was there little teaching for judgment, there was seldom a clear identification of what was meant by "teaching for judgment," possibly because educators did not recognize judgment as an important educational goal or because they thought it incapable of being taught.
6. It was not recognized that most pedagogies of the "thinking in education" movement were inappropriate. The only fully appropriate pedagogy was the one called "the community of inquiry approach," and relatively few teachers had been effectively prepared to use that approach.
7. No effort was made to connect the various dimensions of thinking (critical, creative, and caring) into a whole, both conceptually and developmentally. Critical thinking by itself came to be

seen as a disconnected, discontinuous fragment, shouldered with responsibility for upgrading the whole of education.

Some parts of the second edition of *Thinking in Education* are retained from the first edition; Parts Three and Four are almost completely new. What these new parts offer is a view of education at a more comprehensive level of effectiveness than critical thinking by itself could ever hope to achieve. Some components new to the elementary school level of education have been introduced: emotions, caring thinking, mental acts, and informal fallacies. I have tried to merge both new and old elements into an integrated developmental sequence that will offer at least a glimpse of the direction in which we are to go. It is my hope that we can thus achieve an education that enriches, enlightens, and liberates, that fosters understanding, strengthens judgment, improves reasoning, and imparts a clear sense of the relevance of inquiry to the enlargement of humanity. Fortunately, there are already in existence approaches to education that demonstrate unequivocally that these goals are feasible.

PART ONE

EDUCATION FOR THINKING

1

The Reflective Model of Educational Practice

There are three key models of private and public institutions in our society. The family represents institutionalized private values. The state represents institutionalized public values. And the school epitomizes the fusion of the two. As an amalgam of private and public interests, the school is no less important than the distinctively private or the distinctively public. In some ways it is the most important of all, because through it past and present generations deliberately and consciously attempt to stamp a design upon the future. Yet in all three institutions – family, government, and school – practice and policy conflicts abound, for each family and each government administration would like to shape succeeding generations in its own image, but the facts of social change – growth, regression, aimless or orderly drift – conspire to defeat such aspirations.

The school is a battleground because it, more than any other social institution, is the manufacturer of the society of the future, and virtually every social group or faction therefore aspires to control the school for its own ends. Not that this is generally acknowledged. The received opinion has it that the schools reflect the accepted values of their time; they are not to challenge such values or suggest alternatives to them. Many parents shudder at the notion that the schools will take it upon themselves to become initiators of social change, because they fear that this will merely mean that the schools will have been captured by this or that social faction seeking to impress its will upon the world.

If, then, the school is looked upon as the representative of all social factions rather than of any one in particular, it is able to retain its claim to legitimacy in a democratic society, because it will not have surrendered its claim to impartiality. On the other hand, it will tend to be under these circumstances a very conservative – even traditionalist – institution.

And this is, in fact, what the school is in our present society. As for the schools of education that prepare future teachers, they probably do not see themselves as suppliers of technical personnel to school districts that constitute the market for such personnel. Yet school districts specify what textbooks they want taught and how they want them taught, and it would be unlikely that they would hire prospective teachers who have been trained to teach very different books in very different ways. So schools of education justify their resistance to change on the ground that it would be a disservice to their students to prepare them any differently, despite the fact that few professors of education have full confidence in the methods of teacher preparation they employ. But schools of education are not alone in this; school districts excuse themselves on the ground that textbook and test publishers provide them with no feasible alternatives, and the publishers in turn point out that they are circumscribed by state departments of education and defended by the research that emerges from the schools of education in these same states. And so each factor sees itself as fixed in its position and helpless to change. For all practical purposes, therefore, critics from the outside are wasting their breath. Considerations like tests and texts and turfs – in short, economic and bureaucratic considerations – have locked the system in place so that, like a boat with a jammed rudder, it is only free to move about in circles.

Were these the only considerations, the situation would be much more dismal than it actually is. The allegiances that keep the members of the family cemented together are kinship, child-rearing necessities, the economic division of labor, and sexual interdependence. The primary governmental allegiance is to consensus, in the name of which virtually any military or economic policy can be justified. (The courts represent a partial exception to this generalization, since constitutionality and precedent must also be taken into account. But the laws followed by the courts are consensus-generated.) The schools, on the

other hand, have a very different criterion to which they can appeal, and that is *rationality*.

RATIONALITY AS AN ORGANIZING PRINCIPLE

There are, of course, many kinds of rationality. There is means–end rationality. An example is the corporation that sees its ultimate objective as profit and its various policies as means of maximizing profits. Another type of rationality has to do with the distribution of authority in a hierarchical organization. Examples are the military, the church, and the government. These may also be seen as mixed types. The army, for instance, is hierarchically organized yet is always prepared to seek military victory. The schools too are bureaucracies, with a rationalized distribution of authority, but their goal is the production of educated persons – persons who are as knowledgeable as they need to be and as reasonable as they can be helped to be.

Reasonableness is not pure rationality; it is rationality tempered by judgment. The schools, like the courts, are under a mandate of rationality, but in a democratic society we need reasonable citizens above all. How are we to educate for reasonableness?

It is not simply that the schools must themselves be rationally organized so that they can justify their organization and procedures to lay boards of education. It is not simply that they operate for the good of those they serve (in contrast to businesses, which operate for the profit of those who own or who manage them). It is that the students who pass through the schools must be reasonably treated in an effort to make them more reasonable beings. This means that every aspect of schooling must be, in principle at any rate, rationally defensible. There must be better reasons for using this curriculum, these texts, these tests, these teaching methods than for using alternatives to them. In every instance, the rationale is the same: Children brought up in reasonable institutions are more likely to be reasonable than children raised under irrational circumstances. The latter, as we know, are more likely to be those who grow up irrational and raise their own children irrationally. More reasonable schools mean more reasonable future parents, more reasonable citizens, and more reasonable values all around.