Introduction

It has been five years since the three-column diagram that depicted three types of teaching and learning was published in *The Paideia Proposal*. It was repeated in the later Paideia books: *Paideia Problems and Possibilities* and *The Paideia Program*.

Since then, I have had a great deal of experience in discussing the three kinds of teaching and learning with principals and teachers all over the country, especially in the many schools that have already introduced elements of the Paideia Program or have indicated a serious interest in initiating it.

As a result, I think I can now make the differentiation of the three types of teaching and learning more clearly, and that I can also clarify what is involved in the conduct of seminars in a way that will answer many questions that teachers have asked about it, and give them greater guidance in their efforts to engage in this kind of teaching.

With respect to each of the three kinds of teaching and learning, I propose to proceed as follows: first, to define the outcome to be achieved; second, to indicate the several modes in which that kind of teaching can be done; third, to discuss the relative effectiveness and durability of the learning that results; fourth, to comment on the method of teaching involved in each of the three kinds; and, finally, to consider the means of evaluating the outcomes.

I will begin with the first column, didactic teaching—the kind that is now done by most teachers. Here I will only suggest how this kind of teaching can be improved in relation to the kinds of teaching to be done in the second and third column.

The second column—coaching—is a more important element in the Paideia Program. Coaching is also the element that should be associated with the conduct of seminars in the three-hour period called for by the Wednesday Revolution. I will, therefore, treat coaching second.

From the point of view of the Wednesday Revolution, and of the Paideia Program as a whole, seminars are the most important element and the one for which teachers are least prepared by the training they have received. It is on this subject, which will come third, that I have the most to say.

Column One: Didactic Instruction

1. **Outcome**

   Information or knowledge of the facts in a field of subject matter.

2. **Effectiveness and Durability**

   The poorest, least effective didactic teaching involves merely the imparting of information about matters of fact, information that is memorized by students mainly for the purpose of passing tests that measure their possession of such information.
More effective didactic teaching would involve the acquisition of knowledge by the student rather than mere information. Knowledge consists of information about the facts accompanied by some understanding of them. This cannot be achieved by didactic teaching that is not augmented by discussion of the information imparted by the teacher or by textbook readings assigned.

To make didactic teaching more effective, a fifty-minute period should be divided into two phases; the first phase, running for thirty minutes, in which the teacher lectures; the second phase, running for twenty minutes, in which the teacher engages in discussion with the students, getting them to ask questions or asking them questions about the meaning of the facts covered in the first phase.

Mere information imparted by teachers and memorized by students is the least desirable of all the products of teaching and learning. Nor is there any reason why it should long endure after standardized tests have been passed. Most of it can easily be looked up in reference books. Genuine knowledge of matters of fact is more durable than mere information about them, but it is less durable than habitual skills firmly established and continually used, and much less durable than the understanding of ideas achieved in seminars.

3. Evaluation

Short-answer tests can measure the amount of information retained, but they cannot measure as well or at all the understanding of that information which turns it into genuine knowledge of matters of fact.

Column Two: Coaching

1. Outcome

Some improvement in a skilled performance, the skills in question being language, mathematical, or scientific skills, in all of which thinking is involved, so that there is no need for any special or separate coaching of thinking skills.

2. Method

Critical observation by the coach of the performance of those being coached, with the on-the-spot correction of mistakes in performance and the recommendation of ways to correct these mistakes, together with repeated exercise of the right ways to improve the performance.

3. Modalities

Here there is only one mode of coaching, but that one mode is more or less effective according to the number of students being coached at the same time and the amount of time that is devoted to the coaching of each student.

Most effective, of course, is the coaching of a single individual for a sufficient period of time to observe improvement in the performance of the skill. Least effective is coaching a group of twenty or twenty-five students in a period of time that does not allow for attention to individual students. In between these extremes is a spectrum of more and less effective conditions for coaching.

The importance of coaching is so great that it should be attempted even when the conditions for undertaking it render it less effective than ideal conditions provide.

4. Durability

Skills are habits, not memories. Habits are much more durable than memories, especially than the memory of information acquired without much understanding of the facts remembered. But the durability of habits depends upon their being continually exercised; if they are not, they weaken from disuse. Hence the skills perfected by coaching can turn out to be less durable than the understanding achieved by seminars, but they tend to be more durable than the mere information imparted by didactic teaching unaccompanied by any discussion of what is thus taught.

Column Three: Seminars

1. Outcome

The education result to be aimed at here is the understanding of ideas and issues, never information or even knowledge about a body of subject matter. It should always involve consideration of the significance of what has been read (in the case of books) or what has been experienced (in the case of works of art). That, in turn, should lead to the agreement or
disagreement of the participants concerning the main points that have come out in their attempt to understand what has been read or experienced, accompanied by the reasons for holding opposing views or their reasons for judging certain statements to be either true or false.

2. Modalities

In its simplest mode, the conduct of a seminar does not call upon the teacher to give any background information, nor need there be any coaching by the teacher of the intellectual skills of reading, writing, speaking, and listening. The rudimentary seminar here involves mainly questions and answers about what has been read.

In more complex seminars, the teacher may have to provide some background information during the course of the discussion. The teacher may also have to engage in the coaching of reading, especially when it is necessary to help the students obtain a full understanding of the text read in order to get the ideas and issues in it clear enough to be discussed. Nevertheless, the seminar should always begin with questions that open up what is involved in trying to understand the text and conclude with questions that call for agreement and disagreement about what has been understood, or judgments about the truth or falsity of the propositions that have been understood. Since the seminar leader is a participant in the seminar as well as its leader, he or she can engage in this part of the discussion by expressing his or her own views and defending them if they are challenged by other members of the seminar.

3. Evaluation

The outcome of this kind of teaching cannot be measured by any short-answer tests, but only by oral examinations. However, increased skill in reading and writing resulting from seminars can be measured by traditional tests.

4. Effectiveness

The increased understanding that is the ultimate result of the seminar is the most durable of the three kinds of learning. Whatever is understood is rarely if ever forgotten.

5. The materials to be read for seminar discussion

These materials are divided into two types. They are either narratives (stories, plays, histories, biographies) or they are expository works (science, philosophy, essays, documents, etc.).

The simple mode of the seminar is possible only in the case of narratives. With such materials, the seminar should always begin with having the participants tell the story, with the correction of mistakes or omissions as the story is successively told by different participants. The telling of the story provides the basis for a discussion of the significant points raised in the narrative.

For expository texts as opposed to narrative ones, the simple mode of seminar conduction is seldom, if ever, effective. Here the complex mode must be resorted to, with varying degrees of admixture of declarative and interrogative speech on the part of the teacher, as well as coaching by the teacher of reading and speaking, together with probing questions by the leader to get at the truth or falsity of what comes to be understood.

Here, instead of opening by having the story told, the leader must employ questions that direct attention to passages in the text that require careful interpretation to get at what they mean. What the author is trying to say must be sufficiently clear to get everyone around the table before questions can be asked that aim to get at the truth or falsity of what is being said.

To make this happen, the author should be regarded as a participant in the seminar, which cannot be the case unless what the author is trying to say has been sufficiently understood before questions about what he has said can be asked.

6. The choice of things to be read

First and most important of all, the materials chosen for seminar discussions should always be sufficiently over the head of the students at any grade level that they have to reach up to understand what they have read. If what is assigned is completely intelligible to them at a glance, it is not material suitable for seminar discussion, because a seminar should always result in the students understanding
more after they have discussed what they read than before the discussion started.

Second, and almost equally important, the reading assigned should be short enough for adequate discussion during the short period of a single seminar. In the case of very long narratives—a modern novel, for example—only parts can be read for a single seminar, and it may take a number of seminars to discuss the whole. In the case of expository works, it is seldom the case that a whole book can be discussed in a single seminar. Parts, chapters, or sections should be assigned rather than the whole. The whole work may require an extended series of seminars, which amounts to a tutorial on that book.

Third, teachers should never assign things to be read that do not interest them or catch their minds in away that involves them in asking questions about its meaning as they make an effort to understand it.

Finally, in choosing a set of readings for a sequence of seminars, no attention at all should be paid to the field of subject matter in which the materials fall. A haphazard chronological ordering of them is much better than any attempt to order the materials so that they cover themes or topics in a particular subject matter.

7. The dimensions of the seminar

Every seminar has two dimensions: a vertical dimension from top to bottom (from beginning to end) and a lateral or horizontal dimension (from side to side).

The movement of the seminar in its vertical dimension should be directed and controlled by the seminar teacher through the ordering of the main questions that the teacher plans to ask, bearing in mind that the purpose of the seminar is increased understanding of ideas, not covering predetermined ground.

The movement of the seminar in its lateral or horizontal dimensions should be open to all the possible answers that the teacher’s questions elicit from the participants in the seminar. It should be open to all the possible thoughts that the participants can express.

Seminars vary in the degree to which they are controlled and open according to the demands for understanding the text read before the participants discuss its significance and the truth and falsity of what is being said.

A discussion of the Declaration of Independence is likely to be most controlled. Only somewhat less controlled is a discussion of two books, such as Aristotle’s Politics, Book I, and Rousseau’s Social Contract, Book I. In contrast, the discussions of Plato’s Apology, Machiavelli’s Prince, and of Antigone by Sophocles are much more open.

When a seminar is open in both of its dimensions, it is not truly a seminar. It is a poor counterfeit of a seminar—a bull session or a rap session.

When a seminar is directed or controlled in both directions, it is not truly a seminar either; it is didactic and dogmatic. It also is a poor counterfeit of the seminar—a quiz session in disguise.

8. The immense variety of seminars

There is no one right way of conducting seminars. Every book or piece of reading assigned calls for a unique approach appropriate to that particular reading and accommodated to the students participating in the seminar at a particular grade level.

Even for a given book or reading assignment at a particular grade, two seminar teachers may conduct good seminars in quite different ways. What is common to all these different ways of conducting seminars is the result they achieve: some increase on the part of the participants in the understanding of what has been read and some exercise of thought on their part in dealing with differing interpretations of what has been read and differing judgments about its truth or falsity.

I have been conducting seminars for sixty-five years since 1923. In that time, I have conducted many thousands of seminars dealing with many hundreds of readings, often conducting seminars dealing with the same reading materials many, many times. My files contain innumerable notes that I have made for the conduct of all these seminars. An examination of my files would discover the extraordinary variety that occurred in the conduct of all these seminars, varying with different books, varying with different groups of participants, and varying even with the same reading material at different times in my life,
with different participants, and under different conditions.

In the course of sixty-five years, I have improved in my ability to conduct seminars, but even at the beginning, when I was quite young, I did well enough simply because I was a little older than the students and worked a little harder than they did in my effort to understand the book being read and to think of questions it raised for them to consider.

Any teacher who understands this and regards himself or herself as a superior learner with regard to any book that is the subject for seminar discussion cannot fail to help the students in the seminar to become learners also.

9. Misunderstandings to be avoided

In the last five years, I have, at the invitation of elementary and high schools across the country, done a great many demonstrations of seminar performance with students at the elementary and secondary level and also with their teachers. I have also shown one or another of the five videotapes of seminars I conduced with seniors at the Millbrook High School in North Carolina (no available from Encyclopedia Britannica, Inc.).

The readings have included narratives, such as Hamlet and Antigone, documents, such as the Declaration of Independence and the Preamble to the Constitution, and philosophical writings, such as Plato’s Apology, the first book of Aristotle’s Politics together with the first book of Rousseau’s Social Contract, and Machiavelli’s Prince.

In the case of the videotapes made in North Carolina, teachers were present who asked me questions about the conduct of the seminars; my discussion with them is recorded on these videotapes. In other cases, I have garnered questions and comments from teachers who observed the performance of the seminars.

From all this experience, I have slowly, much too slowly, become aware of grave misunderstandings of what is involved in the conduct of seminars. The misunderstandings are partly my fault, for in my first efforts to contrast didactic with Socratic teaching, I oversimplified the contrast between them and used words loosely in a manner that made my oversimplification easily remembered. I now must correct that oversimplification. The widespread misunderstanding of the difference between didactic and Socratic teaching must be corrected once and for all.

The misunderstanding that I am referring to is manifested in the questions I have been asked by teachers who observed demonstration seminars. They ask: Weren’t you a bit too didactic? Didn’t you talk too much instead of just asking questions? Weren’t you making them too aware of their lack of understanding of the meaning of certain words or passages, or their misunderstanding of the text on one point or another? Did you intimidate them by exposing the inconsistencies or contradictions into which they had fallen? Or by telling them that what they said was incorrect—plainly false? Or by leaving them up in the air when they could not answer your repeated query, “What reasons do you have for saying that?” By pointing out that the arguments they advanced were unsatisfactory, by telling them they had not listened carefully to the question they were undertaking to answer and so the answer they gave was not relevant, and even by going so far as to tell them that their use of language was so confused that what they said made very little sense?

I hope that questions of this sort do not indicate that the teachers who asked them cannot recognize or acknowledge that students may fail to understand what they read, misunderstand it, or understand it inadequately; that students may be irrelevant as well as relevant in their answers to questions, either because they do not listen well enough or because they do not have a sharp sense of what is and is not relevant; that the opinions that students express may be wrong or right, false or true, incorrect or correct; that the arguments they try to advance in support of their opinions may be cogent or not, adequate or inadequate; that they may or may not understand what certain crucial words in a text mean; that their sense of words may be so garbled that what they said makes very little sense.

If teachers do recognize all these alternative possibilities, why then are they made so uncomfortable by the fact that I do not hesitate to call a student’s attention to his or her
mistakes or deficiencies when they become apparent in the course of a seminar? Why, in addition, does my doing that and being so strict with students about what they have to say and how they say it cause teachers to make the comment that my demonstration seminar was really not a good seminar, as they understand a good seminar should be, because it was too didactic and not Socratic enough, because I talked too much and even was too dogmatic, instead of just asking questions and allowing anything that anyone says to get by without comment or correction?

There are three answers to the question I have just asked.

(1) The teachers who ask such questions or make such comments have misunderstood what a good seminar should be. They have misunderstood that because of my own initial oversimplification of the distinction between didactic and Socratic teaching.

That oversimplification consisted in drawing the line between two kinds of teaching in terms of teachers unceasingly talking at students, on the one hand, and teachers persistently questioning students, on the other hand. A didactic teacher is a telling teacher; a Socratic teacher is a questioning teacher; and that’s all there is to it.

To correct this misunderstanding of the difference between didactic and Socratic teaching, let me draw another line, this time between two kinds of teacher-talk, between didactic teacher-talk and Socratic teacher talk. Didactic teacher-talk is controlled by the purpose of imparting information—telling students what they should take note of and try to remember for the purpose of passing tests they will take later. Socratic teacher-talk is utterly different. Sometimes it is for the purpose of presenting factual information that provides a background for understanding the text being discussed. Most of the time it is for the purpose of enabling the teacher to ask a question that will then be sufficiently clear to the participants in the seminar so that they can try to answer the question intelligently and relevantly. Socratic teacher-talk is always aimed at getting the students to understand and think about something, never at getting them to take note of it and remember it for the sake of passing a test, never imparting information for its own sake.

Another way of pointing out the root of the widely prevalent misunderstanding of the difference between didactic and Socratic teaching is to note that the difference does not consist simply in the distinction between declarative and interrogative speech on the part of the teacher, as if all declarative speech by a teacher is didactic, and only interrogative speech is Socratic.

The difference, as I have tried to point out, lies in the purpose of speech on the part of the teacher, whether it be declarative or interrogative. The fact that a teacher conducting a seminar engages in declarative speech for more minutes than he or she engages in interrogative speech does not make that teacher any less Socratic in purpose than a teacher who reverses that ratio and engages in more interrogative than declarative speech.

One might say that the ideal Socratic seminar occurs when the teacher is able to report only to interrogative speech—that there is no declarative, but only interrogative teacher-talk, only the asking of questions.

That may occur with very simple texts of the narrative variety and with the very best students in terms of their capacity for understanding the text being discussed and their capacity for thinking about it. But when the text is a difficult expository text and when, in relation to that text, the students the teacher confronts are obviously having serious difficulty in understanding it and thinking about it, then for the teacher to proceed in a purely interrogative manner would be ineffective.

If the aim of the seminar is to help students understand and think about what they have read, merely questioning them will not succeed at all. A great deal of teacher-talk that is always declarative, not interrogative, may be required, but always for the purpose of leading up to the critical questions that students must try to answer.

The amount of such teacher-talk is not the measure of a good seminar or the indication of a bad one. The only proper criterion for a judgment of whether the seminar was good or bad is whether the seminar raised good questions and raised them clearly enough for the students to have their minds actively engaged in trying to understand and think about
what they read, regardless of the amount of time spent in teacher-talk that is interrogative.

The amount of declarative as opposed to interrogative teacher-talk that occurs in a good seminar depends on the amount of help the students at a certain level of capacity need in order to be able to understand and think about questions concerning a text at a certain level of difficulty.

The five demonstration seminars that were videotaped in North Carolina all involved different amounts of teacher-talk on my part (the Declaration of Independence the largest amount because the students needed the most help in understanding it and thinking about it). Nevertheless, they were all equally Socratic seminars and not in any way didactic, if the right criterion for judging them is appealed to, namely, the purpose of the teacher-talk that is declarative rather than interrogative.

(2) The second of the three explanations of the prevalent misunderstanding of what a Socratic seminar should be attributes the cause of this misunderstanding to the little rule-book distributed by the Great Books Foundation for the guidance of novices in conducting seminars, either for adults or for children in schools.

At the time of the establishment of the Great Books Foundation, in the creation of which in the 1940’s I was instrumental, I wrote the first manual for leaders, none of whom were expected to be teachers. Since then other manuals have been produced, but all of them including the current one are addressed to persons who do not have the responsibility that a teacher must discharge.

The Great Books Foundation manuals for moderators are, in other words, intended for moderators who are not teachers, but only persons who are willing to assume the responsibility of chairing a discussion in which all the participants are on an equal footing with regard to the text read and discussed. Such moderators are not teachers in relation to students. Both teachers and students should be learners in a seminar, but teachers must be superior to the students in that process, for if they are not superior, they are not teachers.

Socrates was a teacher. He was certainly superior as a learned to the persons he interrogated for the purpose of helping them learn to understand and to think. If teachers wish to imitate Socrates, they must be teaching-moderators, not the ordinary moderators given guidance by the Great Books Foundation.

Teachers always regard themselves as superior to their students when they engage in didactic teaching, because they have the information or even sometimes the knowledge that their students do not have and should acquire. They should also regard themselves as superior learners when they engage in Socratic teaching—in the conduct of seminars. If they cannot do this, then in their conduct of seminars they are not teachers, for they are no better than their students in understanding and thinking about the text read and discussed.

Their being Socratic moderators, or teaching-moderators, means that they can tell the difference between a correct and incorrect, a relevant and an irrelevant, a more and less true, a more and less adequate, answer to whatever questions they ask. It also means that they are able to engage in good declarative teacher-talk as well as to ask good questions. Declarative teacher-talk is good if it helps the students understand and think about the questions posed, just as interrogative teacher-talk is good if it poses the best, the most critical and penetrating questions, about the text read.

(3) Finally, I come to the third explanation of the widely prevalent misunderstanding of what a good Socratic seminar should be. More than an explanation of that misunderstanding, it points to the reason why many teachers recoil from the correct understanding that I am here offering, to replace the misunderstanding that now prevails.

The reason that many teachers will resist or even resent being told that in conducting seminars as Socratic moderators of them they should regard themselves as superior to their students (as they do regard themselves superior when they are engaged in didactic teaching) lies in a malaise that pervades the whole academic world.

In our schools and colleges, both students and teachers suppose that, outside the sphere of mathematics, the exact sciences, history, and even some social studies, there are no right and wrong answers to questions, no true and false propositions, no adequate and inadequate arguments or explanations.
That being the case, how dare teachers correct students in seminars when the questions being raised are not about matters of fact or answerable in terms of well-established knowledge in a given field of subject matter? And if they dared to do so, wouldn’t they be faced by students who challenged their right to do so?

The cultural or intellectual malaise of which I speak can be described as phony tolerance. It denounces as dogmatic and authoritarian anyone who regards one person’s opinions as better than another’s. It translates everyone’s right to hold whatever opinions can be espoused into an acquiescence in the view that all opinions are equally tenable, no one better, sounder, truer than another.

Freedom of thought and expression includes the freedom to be wrong as well as to be right; it does not abolish the distinction between right and wrong. It also involves the freedom to change your mind when contrary evidence advanced and reasons given should cause you to change your mind when you are wrong. Your right to hold whatever opinion you happen to espouse in no way guarantees that the opinion you happen to hold is right, nor does it mean that you should not yield to correction and not change your mind if it can be shown that you are wrong.

Teachers who, in conducting seminars, fail to correct students when they are wrong, because they misunderstand the meaning of freedom of thought and discussion, do not discharge their obligation as teachers. Students who resist being corrected or cry out that they are being intimidated by their teachers who correct them do not discharge their obligation as students. They lack the essential virtue of students—docility, which is a mean between subservience and contentiousness. The use of the word “intimidation” indicates that both the teachers and the students misunderstand their relationship and their mutual obligation to one another.

I recommend to all who aspire to become truly Socratic or teaching-moderators of seminars that they read the best statement ever made about freedom of thought and expression. It is to be found in the second chapter of J.S. Mill’s great essay On Liberty. I also recommend reading the chapters on truth in a book of mine, Six Great Ideas, especially chapters 6-8.

This is the medicine that may help cure the malaise I have called phony twentieth-century tolerance. Without the cure being effected for students and teachers, there is little hope that they will ever enjoy the profit, and the pain as well as the pleasure, of good Socratic seminars.

10. Some Final Observations

On re-reading what has been set forth above, I would like to add a number of qualifications and comments.

(1) I have said that I think that the teacher-moderator should not hesitate to exercise a corrective influence upon the speech and thought of students in a seminar. But while doing so is not only desirable but also necessary if teachers are to discharge their responsibilities, this should be done with clear awareness of the fact that the correction of errors is not the sole or main purpose of the seminar, as it is in the process of coaching. It is more important to keep the seminar moving and to allow a good decision, aimed at clarifying ideas, to exercise its own corrective influence.

(2) Not all questions have right and wrong answers; in fact, the most difficult and penetrating questions usually do not. They should elicit a variety of competing answers, all of which should be considered and weighed against one another, in the light of whatever evidence may be offered and whatever reasons may be advanced in favor of one or another.

One of the most important results of a good seminar is to leave the students with difficult issues unresolved, matters to be pondered. On such matters, unanimity of opinion is not to be sought, but rather a shared understanding of the alternatives to be considered.

(3) There are three kinds of declarative teacher-talk, not two. The two that have been mentioned are (a) didactic telling, which consists in the imparting of information to be memorized (i.e., the indoctrination that is counterfeit of genuine teaching); and (b) declarative speech on the part of the seminar leader solely for the purpose of preparing the participants in a seminar to understand the questions that the moderator wishes them to
consider and answer. Here the declarative mode of speech is always followed by the interrogative. In didactic telling by teachers that normally consumes the whole fifty-minute period, the declarative mode of speech is uninterrupted; it is not accompanied or followed by questions; nor is its main purpose preparation for the asking of questions.

To call such didactic telling by teachers “lecturing” is a misuse of that word. While a formal lecture may consist in uninterrupted declarative speech for an hour or more, it is something quite different in character and purpose from ordinary classroom declarative teacher-talk. Using the term “formal lecture” for (c) the third kind of declarative teacher-talk, let me indicate what differentiates it from the kind of didactic telling that aims at imparting information to be memorized.

The formal lecture may stand by itself or it may be one in a series of formal lectures. Its controlling aim is to present the lecturer’s analytic understanding of an idea, a problem, an issue, or some complex area of knowledge or inquiry. Its controlling aim is to provide the audience with an occasion for thinking and for increased understanding.

If the formal lecture is followed by a question and answer forum in which points raised in the lecture are discussed, it may go beyond providing an occasion for thinking. It may, like the seminar, actually help the students engage in thinking about the matters being considered. If the formal lecture is not followed by a sustained discussion, it falls short of what seminars can do to provoke, encourage, and help the thinking of students. But, with or without such sustained discussion, the formal lecture is a kind of teaching that, in purpose, is much more like the conduct of seminars than it is like the didactic telling of ordinary classroom talk for the sole purpose of imparting information to be memorized.

(4) In its vertical dimensions, the sequence of questions that constitute the teacher’s plan for conducting the discussion controls its movement from its opening to its closing considerations. But in its horizontal dimensions, the responses of students determine the latitude of the discussion—the extent to which it expands at each stage of its development. In this dimension, students may—in fact, it is hoped they will—engage in cross-table talk, questioning one another, expressing opposite views, arguing with one another, and agreeing or disagreeing about where the truth lies. The more the seminar is an experience of active learning for the students, the sooner they will become active learners in their reading of texts for future seminars and the sooner they will be able to engage in learning by themselves without the help of teachers, which is the ultimate desideratum of all teaching.

(5) Since questions asked by either teachers or students, lie at the heart of seminars, a word more should be said about the variety of questions that can be asked. Each type of question—questions of fact, of interpretation, of judgment—performs a different function. Some questions call for Yes or No answers; some elicit a wide range of alternative responses, which may or may not be compatible with one another; and some generate strictly contradictory, or at least contrary, answers that challenge students to put themselves on one side or the other of a clearly defined issue that seeks resolution. Confronting contradictions and attempting to resolve them is probably the most illuminating experience in the pursuit of truth. Hypothetical questions are also very useful because they call attention to assumptions and consequences.

(6) Finally, I would like to recommend the reading of the chapter on the conduct of seminars in The Paideia Program and also chapters V, IX, XIII, and Appendix III in a book of mine, How to Speak/How to Listen (available in paperback edition).

The Paideia Curricular Framework

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<td>Acquisition of organized knowledge</td>
<td>Development of intellectual skills—skills of learning</td>
<td>Enlarged understanding of ideas and values</td>
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<td>Means</td>
<td>by means of Didactic instruction, lectures and responses, textbooks and other aids in three areas of subject matter</td>
<td>by means of Coaching, exercises and supervised practices</td>
<td>by means of Maieutic or Socratic questioning and active participation in the</td>
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<td>Areas, Operations and Activities</td>
<td>Language, Literature and the Fine Arts Mathematics and Natural Science History, Geography and Social Studies</td>
<td>in the operations of Reading, writing, speaking, listening Calculating, problem-solving, observing measuring, estimating Exercising critical judgment</td>
<td>Discussion of books (not textbooks) and other works of art and involvement in artistic activities, e.g., music, drama, visual arts</td>
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The three columns do not correspond to separate courses, nor is one kind of teaching and learning necessarily confined to any one class.