

CRITICAL THINKING: A SIGN OF THE TIMES

Teachers know that next to maintaining order in the classroom their most difficult pursuit is instilling into the students, or drawing forth (whichever viewpoint you take on the matter) a desire to learn, or having students enter into the educational marketplace and partake of its offerings. Placing the problem of motivation second to that of discipline is perhaps reversing the order of difficulty, and a closer look at these two aspects of teaching will reveal that lack of discipline is usually indicative of a poorly motivated group. Perhaps motivation should share top billing with discipline as a teaching problem.

One of the most difficult elements of teaching is to motivate students to think. All other motivational endeavors, difficult as they may seem in the day to day workings of a classroom, are mere trifles when compared to getting youngsters to think. The human being would rather do almost anything — watch what they give him on television, attend football games, or even do manual labor — than think.

Teachers know that students will balk when asked to do drill work, or asked to memorize and recite the first three stanzas of *The Rhyme of the Ancient Mariner*, or to set up a word problem in algebra, or to do homework, or even to take examinations, but as long as the student is not asked to think, the drill work and all the rest will be accomplished and the school day will pass. The accepted practice has been to give enough busy work to each student, and both motivation and discipline become tame problems.



Now a teacher has a right to ask, isn't my goal the establishment of motivation and the maintenance of discipline? As long as children are happy in school and are occupied, what else is required? Why all the fuss? Unfortunately for teachers, just as they arrive at the point of solving a teaching problem, someone steps in and upsets everything by saying they forgot something. Teachers have been going along nicely in schools and someone who reads John Dewey in a college classroom tells them that they are all wrong, that what teachers have to do is get students to think. Teachers, this person says, must develop critical thinking. What he does not know is that this suggestion will really upset the applecart.

The preceding paragraph depicts one type of attitude toward the view that the prime aim of the school (elementary to graduate) is to get students to think and not to behave like parrots or robots. This attitude will persist unless those who insist on the primacy of critical thinking face up to the fact that getting students to think critically is probably the most difficult task awaiting the teacher who attempts it.

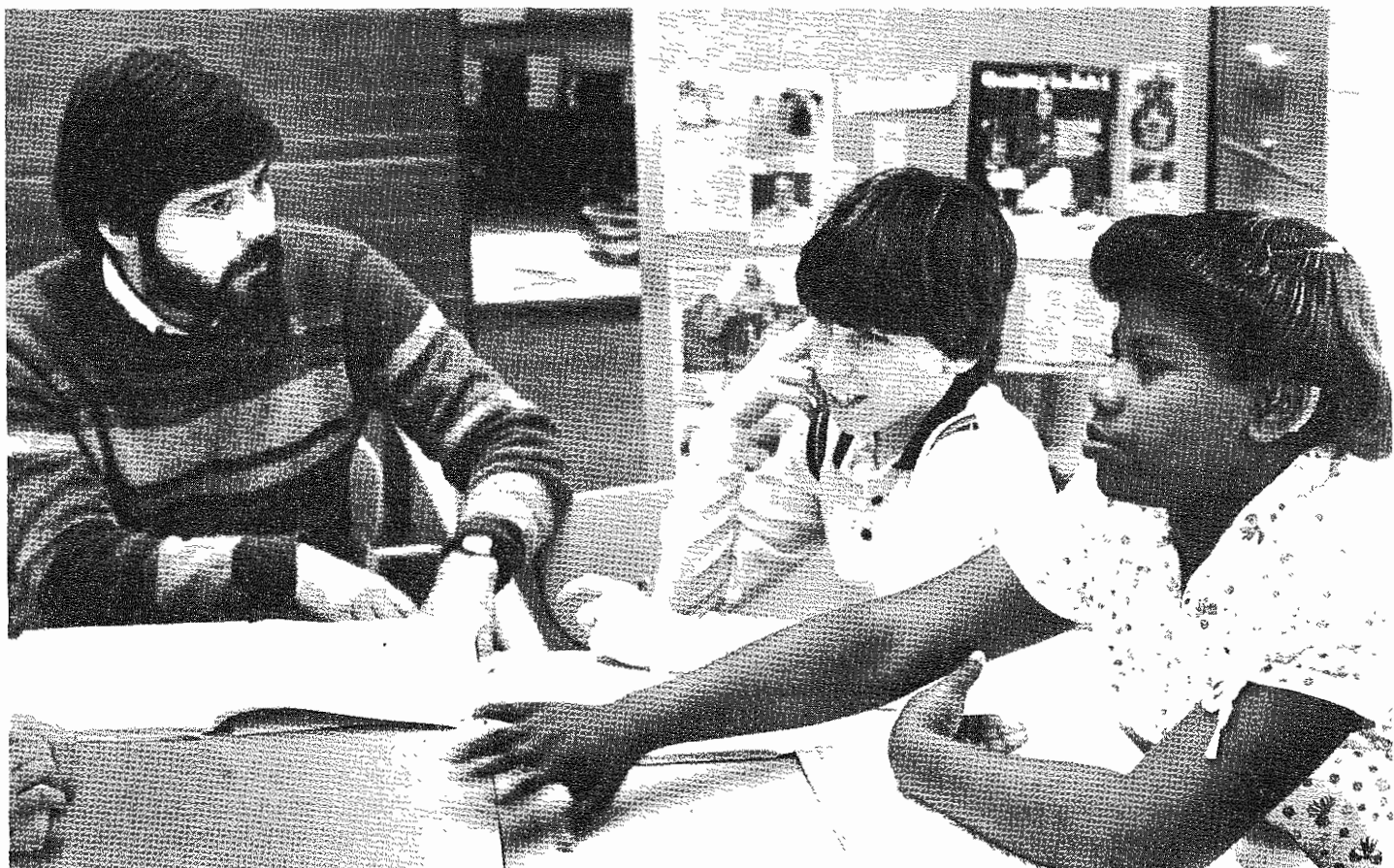
Motivation for Critical Thinking a Sign of the Times.

There are a number of factors which makes motivation for critical thinking so difficult to effect. In regard to critical thinking: (1) Very few people do it; (2) those who do are not members of the team, they do not fit, they do not adjust; (3) the average youngster if he is to be accepted by his group cannot afford to be critical of the group's customs, values and practices; (4) he need not think because his thinking is being taken over by the mass media; (5) living in an impersonal world, he joins some sort of pressure group and takes over its pronouncements; since coming to his own conclusion on the basis of reason is much too difficult given the vast number of alternative viewpoints vying for his allegiance; and (6) he was never asked or made to think critically.

The first five factors given have been brought about by the social pressure which weighs down on all of us. It is as though society is conspiring against those few who have fought against the pressure as they try to undertake the task of reducing that pressure. The fatalists among us can say that individual critical thought is dead and we must all become members of the "lonely crowd," but there are those who proclaim that social patterns can be changed or redirected by human effort. And that effort will come forth when new ideas are created to stem the tide.

The sixth factor is the one which lends itself to the teacher as a point of debarkation. If the teacher can upset this factor by asking and making the student think, then this effort may produce repercussions all along the line. However, asking the student to think and making him think are two different things as every frustrated teacher knows too well. Let me give an example.

The teacher of an algebra class wanted to get his students to realize that algebra was not a series of mechanical steps but had to do with the relation existing among mathematical processes. He felt that students should begin



to draw conclusions about these processes. To effect this aim he asked a number of them to write the number 6 on the blackboard. They all wrote "6." He then asked them to write that number one other way. No one knew the answer. But this lack of knowledge is not as important as some people are inclined to think as they berate education and educators. What was important was the reaction of the students. They began to get uneasy, they seemed to lose a sense of security gained from years of instruction which told them that there is one and only one way to write the number 6. Even when given the answer they felt that they were being attacked, that the teacher was attacking their egos. The boldest spoke up and asked what this had to do with algebra and why didn't the teacher stick to the text.

The teacher in this case had failed to bring about critical thinking because he did not heed the motivational problem. He was eager and full of fervor about his subject and his goal, but his own motivation could not be carried over automatically.

Personality and Criticism. In regard to the development of a critical posture we can view the personality of the individual in the following manner: each individual can be thought of as containing two related aspects: the rigid and the flexible. These can be conceived of as two concentric circles, the circle of rigidity and the circle of flexibility.

The circle of rigidity contains the greatest area and represents the summation of custom, habits, and social pressure. Rigidity makes the usual manner of reacting and indicates our immediate response to spinach, modern art,

the twelve-tone scale, political parties, poetry, etc. Our world of stereotypes is formulated by rigidity and it forms the stable element in our makeup, and what is more, it is needed if we are to feel secure in this confused world. Rigidity increases with age. The area of flexibility is much smaller, and it is this area which gives to each person his sense of individual uniqueness. Flexibility sets him apart somewhat from others in the society and is the creative element of the human psyche. Flexibility allows the person to seek out and understand those elements in his environment which are different, which do not make sense. The pattern of rigidity is modified by flexibility.

These two aspects of personality are related, and this fact must always be retained even though a separation is made for reasons of discussion and analysis. The area of rigidity is built and in a sense is never completely formed. However, the years pass and the chances of changing the rigid pattern become slimmer. The function of the teacher then is to enlarge the area of flexibility while at the same time being careful not to destroy the base of security without which the individual becomes a lost soul.

It is very easy for the teacher to criticize students who show lack of a critical attitude but to do so merely increases rigidity on the part of the student.

In the teaching example previously cited, the teacher failed in his effort because he was in effect criticizing his students' lack of knowledge. Rather than developing the area of flexibility he attacked the circle of rigidity, and this proved to be a serious teaching error. What was necessary

was a shift in method.

Motivation and Method. There seems to be a belief that motivation comes prior to learning. Before the teacher can utilize teaching methods he has to motivate his students. We can call this the pep rally theory of teaching. The only trouble with this theory is that it seldom fits the situation. Subjecting students to pep speeches at the beginning of the course may serve to use up time while the class gathers its bearings, but it does not make the task of teaching critical thinking any easier. Motivation is part of the teaching method and cannot be separated from it. With this in mind we would like to discuss two methods which can help motivate learning critical thinking.

The first method can be termed the method of creative discovery. What is implied in the term creative discovery is that the student be given a chance to discover relationships by himself. This means the teacher sets the stage so that the student will think through conclusions to the problem studied by means of his own creative experience.

For example, the teacher's aim in a lesson may be to analyze stereotypical thinking and attitudes. The teacher at the onset of the lesson asks the students to list racial characteristics of the Oriental, the Black, and the Caucasian. He then has the students construct a table which lists various national groups according to their political, religious, linguistic, and racial aspects. The first national group listed is American and the student will probably enter democracy under the column labelled political; Protestant, Catholic and Jewish under religions; English under linguistic; and white under race. Since the list is on the blackboard the teacher hopes that at least one student will spot the instance of the stereotype. He may direct their attention to the slip but if the students do not pick up the cue he must formulate another scheme by which the revelation can come from the student. Note that the teacher does not force the conclusion on the class.

Another example comes to mind. Suppose the teacher feels that the textbook's interpretation of a fact is to be questioned. Rather than revealing this to the student, the teacher forearms the student with prior knowledge and again hopes that the student will come up and say "Why, the text is all wrong on this point."

In other words, the teacher brings into the teaching picture elements which he knows can be spotted as incompatible with each other by the average student. This can also be called the shock theory in that the student is made to realize that oft-times accepted modes of thinking cannot answer the question at hand.

The second method is termed the double-dare-you method. We all recall our amazement when at the home of a proud father of a 14-month-old boy we saw him toss the child into the air and catch him. How cruel, we thought, only to be interrupted in our thought by peels of laughter coming from the baby. Here then is an act which by all psychological evidence should frighten the child yet it does not. The reason for this is because there is a certain thrill element in undertaking dangerous acts which in the case

cited exhilarates the baby as it does the adults who gained the nerve to ride a roller coaster. Yet the danger cannot be too great or else the thrill will change into genuine fright. In order to obtain the emotional kick that comes from flirting with danger, a base of security must constantly be held in sight. Therefore, a student can be led into strange pursuits by making the venture one of excitement and adventure. The student is dared to participate in intellectual activities. The teacher shows that intellectual activity can be a tremendous challenge. In practice this means that when the student cannot accept a proposition and the student counters with his own motion, the teacher challenges the student to prove his own contention. The important thing here is to gauge the challenge so that it is either within the students' range or just beyond it.

The single phrase, "I bet you can't do it," has been used by parents as they attempt to get their children to clean up the yard, wash dishes or perform other distasteful chores. The teacher who wishes to motivate for critical thinking can do well to borrow a page out of the parents' manual to effect participation in a far-from-distasteful task.

These are but two methods and as can be seen, they are general methods. They are not new and cannot be considered as perfect. In the last analysis the teacher has to think through the problem of motivation for himself.

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