

and wishes, depending on their different ways of life—identifications, loyalties and values; (b) the purposes, wishes, etc., exist in different degrees of awareness in the minds of the members; (c) the purposes of a member respect both the changes he would like to make in himself but also those he thinks others ought to make; (d) within the life-style of each person, only certain of the purposes (or only certain ways of achieving the purposes) are legitimate ingredients in the negotiations of the group; and (e) each person must accept responsibility for defining what being a member or developing membership in the group is to mean to him.

The kind of significance a group will have to its members and to society de-

pends, I think, on the adequacy of the processes instrumental to the understandings just listed. Making wishes known, being encouraged to become aware of what one really seeks, defining one's own place and function *vis-à-vis* others in the action system, recognizing and accepting the parts of one's life involved in the group and subject (in some way) to its jurisdiction, and, finally, reflecting on and assimilating the concerns, insights and purposes of the group within his own style of thought and life—these are the processes on which the creativity, adaptiveness, and significance of group life depend.

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Not So Fast

Norman Cousins

THE ultimate test of education is represented by the ability to think. We are not talking about casual or random thought. We are talking about sequential thought; that is, the process by which one frame of ideas is attached to another in workable order so that they fit together without rattling or falling apart the moment they come in contact with a logical objection or query.

Sequential thought is the most difficult work in the entire range of human effort. Even when undertaken by a highly trained intelligence, it can be enormously fatiguing. When attempted by untrained minds, it can produce total exhaustion within a matter of minutes, sometimes seconds. For it requires an almost limitless number of mental operations. The route must be anticipated between the present location of an idea and where it is supposed to go. Memory must be raked for relevant material. Facts or notions

must be sorted out, put in their proper places, then supplied with connective tissue. Then comes the problem of weighting and emphasis.

Sequential thought, like any other advanced form of human activity, is the result of systematic training. Just sitting in front of television screens watching baseball games for a dozen years or more doesn't automatically qualify a man to throw strikes with blazing speed. Either he has the educated muscles to pitch or he hasn't. The same is true of thought. A man who doesn't know how to use the muscles of his intelligence can hardly be expected to cope with a problem requiring concentration and the ability to think abstractly.

How, then, can a person be taught to

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think sequentially? It isn't necessary to devise special courses of study for this purpose. All that is necessary is for existing courses to foster those conditions that promote proper habits of thought. The problem lies not with the curriculum; it lies rather with the way education is generally organized.

Fragmentation is the enemy of sequential thought. Yet there is a large degree of fragmentation in the way a youngster is called upon to meet his educational obligations. He may have four or five different courses of study. In the space of a few hours he has to shift his focus of attention drastically several times, resulting often in a blurring of the significance of what he is being taught. Each class or course tends to be something of a universe in itself. This may provide welcome relief in some cases but it also violates many of the basic laws of concentration as they apply to intellectual absorption and retention. This is hardly reassuring at a time when the relationships among the various fields of learning have become a prime need in education.

Homework assignments are only rarely correlated. On some nights a student may have three or four major assignments, making it virtually impossible to do them all adequately. We have never been able to understand why a homework paper in history, say, and an assignment in English composition cannot be combined. Far better to give a youngster a chance to put his history paper into decent English than to require him to go racing through separate assignments in both subjects. More basic still: Why shouldn't the school attempt some measure of coordination in homework assignments, with each course having at least one night a week in which genuine concentration and sus-

tained work would be expected and made possible?

H. L. F. Helmholz, the noted German physicist who died seventy years ago, described three principal stages in effective thinking. In the first stage, a problem is carefully examined in all its aspects and all directions. In the second stage, ample time is allowed for a problem or an idea to get through to the subconscious in order that the mind may work on it and develop it even when not specifically focused on it. The third stage involves the conditions or circumstances under which an idea is brought to full term and makes its appearance. Helmholz's analysis may not hold for all people—nothing is more individualistic than a man's thoughts—but at least he emphasizes the need for thought about thinking. Most of our confusion, James Harvey Robinson once wrote, comes from this failure to give thought to thought.

If we are to help Johnny to think—which is to say, if we are to help him become truly educated—it becomes necessary to respect the natural requirements of thought. Somewhere along the line in recent years, a speed-up has taken place in large areas of education. Johnny is expected to read faster, study faster, write faster, and think faster. No doubt, this is less the fault of educators than of the world itself. But the problems posed by an Age of Speed are not met by snap judgments, one-page memos on complex subjects, lightning-fast reading techniques, or rapid writing. We meet our problems only as we comprehend them and give them sustained and sequential thought. The quickest way to compound these problems is to put them in a pressure cooker.

—NORMAN COUSINS, *Editor*, Saturday Review.

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