

Part I:
*What Is Critical
Thinking?*

History and Overview

◆◆ Chapter 1

The Critical Thinking Movement in Historical Perspective

Abstract

In this paper, originally published in National Forum (1985), Richard Paul discusses the history of education in the United States from the standpoint of critical thinking. He stresses the traditional U.S. emphasis, evident from the earliest days of education, on passive learning, training, and indoctrination. He begins with a characterization of 17th century attitudes and then traces the dominant view of education from initial European settlers to 20th Century critiques of education.

The “critical thinking movement” is beginning to have a palpable effect on the day-to-day life of American schooling. California is a bellwether in this regard. Four years ago, the massive 19-campus California State University system instituted a graduation requirement in critical thinking intended to achieve:

... an understanding of the relationship of language to logic, leading to the ability to analyze, criticize, and advocate ideas, to reason inductively and deductively, and to reach factual or judgmental conclusions based on sound inferences drawn from unambiguous statements of knowledge or belief.

Within two years the even larger community college system established a parallel requirement. And now, two years further down the line, the California State Department of Education is preparing to test all 8th grade students in three areas: reading and written expression, math, and social studies. Remarkably, and representing a strikingly new testing emphasis, approximately one-third of the items were designed to test critical thinking skills. David Gordon, California’s Associate Superintendent of Public Instruction, recently said that he considered the state at the very beginning of a series of reforms in this direction, including textbooks, curriculum, staff development, and teacher education.

Until recently the movement was no more than a small scattered group of educators calling for a shift from a didactic paradigm of knowledge and learning to a Socratic, critically-reflective one. It’s early stirrings can be traced back to and beyond Edward Glaser’s *An Experiment in the Development of Critical Thinking* (1941) and his development with Watson of the *Watson-Glaser Critical Thinking Appraisal* (1940).

Of course, its deepest intellectual roots are ancient, traceable to the teaching practice and vision of Socrates 2,400 ago who discovered by a method of probing questioning that people could not rationally justify their confident claims to knowledge. Confused meanings, inadequate evidence, or self-contradictory beliefs often lurked beneath smooth but largely empty rhetoric. Since his time, Socrates' insight has been variously articulated by a scattering of intellectuals, certainly by the 18th, and increasingly in the 19th and 20th Centuries; Voltaire, John Henry Newman, John Stuart Mill, and William Graham Sumner are a few that come readily to mind. Consider Mill:

... since the general or prevailing opinion on any object is rarely or never the whole truth, it is only by the collision of adverse opinions that the remainder of the truth has any chance of being supplied. (*On Liberty*, 1859)

Or Newman:

... knowledge is not a mere extrinsic or accidental advantage, ... which may be got up from a book, and easily forgotten again, ... which we can borrow for the occasion, and carry about in our hand ... (it is) something intellectual ... which reasons upon what it sees ... the action of a formative power ... making the objects of our knowledge subjectively our own. (*Idea of A University*, 1852)

Or Sumner:

The critical habit of thought, if usual in a society, will pervade all its mores, because it is a way of taking up the problems of life. People educated in it cannot be stampeded by stump orators and are never deceived by dithyrambic oratory. They are slow to believe. They can hold things as possible or probable in all degrees, without certainty and without pain. They can wait for evidence and weigh evidence, uninfluenced by the emphasis and confidence with which assertions are made on one side or the other. They can resist appeals to their dearest prejudices and all kinds of cajolery. Education in the critical faculty is the only education of which it can be truly said that it makes good citizens. (*Folkways*, 1906)

This view of knowledge and learning holds that beliefs without reason and the judgment of the learner behind them are for that learner mere prejudices, and that critical reflection on the part of each and every learner is an essential precondition of knowledge and of rational action. Until now this view has made little headway against a deeply if unconsciously held contrary mind-set. The everyday world — especially in the U.S.A. where the agenda has been filled with one pragmatic imperative after another, a nation with a “mission” to perform and a “destiny” to fulfill — provides little time for self-formed, self-reasoned beliefs.

Let us not forget that schools in the U.S. were established precisely to transmit by inculcation self-evident true beliefs conducive to right conduct and successful “industry”. The best seller of 17th Century North America was Michael Wigglesworth's *Day of Doom*, a detailed description of the terrifying fate of condemned sinners. To question this fate was heresy. In 1671, governor Sir William Berkeley of Virginia could say with pride:

... there are no free schools, nor printing in Virginia, for learning has brought disobedience, and heresy ... into the world, and printing has divulged them God keep us from both!

“Free schools” were set up, as in Massachusetts (1647), “to teach all children to read and write ... (to combat) that old deluder Satan,” or, (1675) to ensure that “children and servants” are “catechized”. In Plymouth Colony (1671) “Education of Children” was mandated because “Children and Servants” were “ ... in danger (of) growing Barbarous, Rude, or Stubborn” and hence were becoming “pests”. This was hardly the climate in which analytic thinking and critical questioning could thrive. All questioning began and ended with a “*Nil desperandum, Christo duce.*” (Don’t despair, Christ is leading us.) This sense of having a mission or mandate from God has discouraged self-reflective questioning. At times it has generated arrogant self-delusion.

As late as 1840, U.S. schools taught the ordinary students nothing but the three R’s, some basic catechism, and a smattering of patriotic history. The school term was short and attendance irregular. In 1800, for example, the average American attended school only 82 days out of their entire lives. By 1840 it had increased to only 208 days.

When the time in school increased, it was not because of a demand for critical thinking but for better reading and writing, skills increasingly necessary in the commercial and industrial activities of the day. To get a sense of the quality of reading instruction, one need only hear the assessment of Horace Mann:

I have devoted especial pains to learn, with some degree of numerical accuracy, how far the reading, in our schools, is an exercise of the mind in thinking and feeling and how far it is a barren action of the organs of speech upon the atmosphere. My information is derived principally from the written statements of the school committees of the respective towns — gentlemen who are certainly exempt from all temptation to disparage the schools they superintend. The result is that more than 11/12^{ths} of all the children in the reading classes do not understand the meanings of the words they read; and that the ideas and feelings intended by the author to be conveyed to, and excited in, the reader’s mind, still rest in the author’s intention, never having yet reached the place of their destination. (Second report to the Massachusetts Board of Education, 1838.)

The increasing use of machinery, the rapid expansion of transportation, and the new waves of non-Anglo-Saxon immigrants, not a change in the basic U.S. mind set, were the main causes of expansion of schooling. For a long time the McGuffey readers, with their parables about the terrific fate of those who gave in to sloth, drunkenness, or wastefulness were as close as the average student got to reflective thinking. Of course, if they wanted, students could cogitate on their own on the higher level questions implicit in this passage:

Remember, that time is money, ... that credit is money ... that money is of the prolific, generating nature, that six pounds a year is but a groat a day ... that the good paymaster is lord of another man’s purse. (Ben Franklin, 1770.)

In 1860 the average North American spent little more than a year in school, and by 1900 spent little more than 2 years. In 1880, 17 percent of the population still could not read or write. Increasingly in this time period the question of empire was before the public and the electorate was expected to decide, for example, whether or not it was justifiable to “rule a people without their consent”. Those, like Senator Beveridge, who favored imperialism, as did the majority of voters, easily formulated a logic whose fallaciousness was not penetrated by the voting majority:

The opposition tells us that we ought not to govern a people without their consent. I answer: The rule of liberty, that all just government derives its authority from the consent of the governed, applies only to those who are capable of self-government. I answer: We govern the Indians without their consent, we govern our territories without their consent, we govern our children without their consent Shall we save them ... to give them a self-rule of tragedy? It would be like giving a razor to a babe and telling it to shave itself. It would be like giving a typewriter to an Eskimo and telling him to publish one of the great dailies of the world. (U.S. Senator Albert Beveridge, 1899.)

Senator Beveridge could link, without fear of significant dissent from an electorate of thinking people, the voice of liberty, Christ’s gospel, and our profit:

Ah! as our commerce spreads, the flag of liberty will circle the globe and the highways of the ocean — carrying trade to all mankind — will be guarded by the guns of the republic. And, as their thunders salute the flag, benighted peoples will know that the voice of liberty is speaking, at last for them; that civilization is dawning, at last, for them, — liberty and civilization, those children of Christ’s gospel, who follow and never precede the preparing march of commerce. It is the tide of God’s great purposes made manifest in the instincts of our race, whose present phase is our personal profit, but whose far-off end is the redemption of the world and the Christianization of mankind.

It should be no surprise therefore that William Graham Sumner, one of the founding fathers of anthropology, was appalled by the manner in which history was taught and the level of uncritical thinking that followed it:

The examination papers show the pet ideas of the examiners An orthodoxy is produced in regard to all the great doctrines of life. It consists in the most worn and commonplace opinions It is intensely provincial and philistine ... (containing) broad fallacies, half-truths, and glib generalizations. (We are given) ... orthodox history ... (so) ... that children shall be taught just that one thing which is “right” in the view and interest of those in control and nothing else “Patriotic” history ... never can train children to criticism. (*Folkways*, 1906)

Higher education was little better. It began in the 17th and 18th centuries in primarily upper class “seminaries”, providing a classical education though not, of course, in the Socratic sense. Students were drilled in Latin and Greek and Theology. Inculcation, memorization, repetition, and forensic display were the order of the day. Not until the latter half of the 19th Century

was higher education possible for someone not in the upper class, and then only at the new Land Grant Colleges (150 new colleges opened between 1880 and 1900), established to promote "education of the industrial classes in the several pursuits and professions in life". Their emphasis was "agriculture and the mechanic arts". Students graduated with an agricultural, commercial, technical, industrial, scientific, professional, or theological focus. Higher education turned out graduates fit to enter farms, businesses, professions, or the clergy. Their "civic" education was not fundamentally liberal but nationalistic, not fundamentally emancipatory but provincial.

The history of teaching fits into this picture like a perfectly carved puzzle piece. In the early days teachers were selected from those who had no other job and could read, write, and cipher. From the start teaching was a low prestige, low paying job. Normal schools did not begin springing up until after 1830, and then their curriculum mainly consisted of a review of the subjects taught in elementary school, such as reading, writing, arithmetic, and spelling. Eventually, and in the spirit of industrialism, science, and technology, education — still conceived fully within the traditional U.S. world view — came to be considered, and is still largely considered, a "science" of methods of "delivery". At no point along the way, even to this day, were, or are, prospective teachers expected to demonstrate their ability to lead a discussion Socratically, so that, for example, students explore the evidence that can be advanced for or against their beliefs, note the assumptions upon which they are based, their implications for, or consistency with, other espoused beliefs. Neither were, or are, they expected to demonstrate ability to think analytically or critically about the issues of the day. The state of affairs (circa 1920-35) is satirically suggested by H. L. Mencken:

The art of pedagogics becomes a sort of puerile magic, a thing of preposterous secrets, a grotesque compound of false premises and illogical conclusions. Every year sees a craze for some new solution of the teaching enigma, an endless series of flamboyant arcana. The worst extravagances of *private dozent* experimental psychology are gravely seized upon; the uplift pours in its ineffable principles and discoveries; mathematical formulae are marked out for every emergency; there is no sure-cure so idiotic that some superintendent of schools will not swallow it. The aim seems to be to reduce the whole teaching process to a sort of automatic reaction, to discover some master formula that will not only take the place of competence and resourcefulness in the teacher but that will also create an artificial receptivity in the child. Teaching becomes a thing in itself, separable from and superior to the thing taught. Its mastery is a special business, a sort of transcendental high jumping. A teacher well grounded in it can teach anything to any child, just as a sound dentist can pull any tooth out of any jaw. (Baltimore Sun, 1923)

One final sobering thought. When, between 1917 and 1934, inductees into the armed forces were systematically tested using the *Army Alpha Tests* (an I.Q. test based on the Stanford Benet) it was estimated that the average U.S. citizen was probably somewhere between 13 or 14 years of age intellectually —

the same intellectual age to which, I understand, most present day T.V. programming is geared. Can we conclude then that most North Americans are intellectually incapable of rising above childish reasoning, or should we rather hypothesize that as a nation both socially and scholastically we have not yet challenged most people to think for themselves beyond the most primitive levels? Are we, and if so will we remain, what William J. Lederer characterized us as being in the 1960's, *A Nation of Sheep*? If Boyer,Sizer, Adler, Bloom and others are right, if the Rockefeller Commission on the Humanities, the International Educational Achievement Studies, the College Board, The Education Commission of the States, the National Assessment of Educational Progress, and the Association of American Medical Colleges are right, then our overemphasis on "rote memorization and recall of facts" does not serve us well. We must exchange our traditional picture of knowledge and learning for one that generates and rewards "active, independent, self-directed learning" so that students can "gather and assess data rigorously and critically". We need to abandon "methods that make students passive recipients of information" and adopt those that transform them into "active participants in their own intellectual growth". Perhaps some old-fashioned intellectuals like Emerson Shideler had *something* of practical value to say after all:

Education is training in *how* to think rather than in *what* to think; it is a confrontation, a dialogue between ways of assessing evidence and supporting conclusions. It implies that the teacher's primary job is that of making clear the bases upon which he weighs the facts, the methods by which he separates facts from fancies, and the ways in which he discovers and selects his ultimate norms This concept of teaching ... requires that the purported facts be accompanied by the reasons why they are considered the facts. Thereby the teacher exposes his methods of reasoning to test and change. If the facts are in dispute ... then the reasons why others do not consider them to be facts must also be presented, thus bringing alternative ways of thinking and believing into dialogue with each other.

Perhaps we, as most people, are constitutionally incapable of learning a lesson until its point becomes a long-drawn-out and painful imperative. But isn't nearly 400 years of "mis-education" imperative enough? Aren't we threatened enough on all sides by prejudice, parochialism, egocentricity, self-righteous ignorance, and an overabundance of miscellaneous gobbledygook and humbug, to consider investing for the first time in our history in the critical faculties of our citizens and in their potential as rational, autonomous thinkers and doers? If I read the signs correctly (including a mass of scathing educational reports), then finally, the time has come. If so, we should think of it, in the spirit of Churchill's oft-quoted remark: "Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning."