Propositions of this type seem to me to be things to which we can and should hue. But to be wandering around the educational landscape, propagandizing for somebody's gimmick; this strikes me as very poor policy. And I might add, you can judge from this what I think of a lot that is going on in American education. I think that the mother lode that is going to give us the answers is going to be in the direction of a science of cognition. It is going to be an understanding of the synapse.

Most of us would accept the proposition that thought is neurological in its base. Well, how is it neurological? What is it that accounts for the fact that a child of 75 IQ and a child of 175 IQ are structually identical? We cannot point to differences. Is there a chemical factor operating here? What is it that crosses these synapses among the neurons? What is the nature of the structural process? Are there things we might be doing that would influence the environment in such a way as to change the basic capabilities of a person? Do we know how to do this? Do we know whether it is the permeability of synapses, for example, that accounts for differences in apparent learning ability? What is it that we sold ourselves 50 or 100 years ago on the thesis that abstract learning could only be by the concrete route and therefore today every first-grade teacher has a set of blocks. We teach Johnny that "two blocks plus two blocks equals four blocks."

Even if Johnny is a real thinker, we set up a circumstance where Johnny ends up thinking that the number system derives from experience; it is natural; it is God-given, if you will. What we thus do is to take a series of synthetic abstract definitions and conceal what they are from this little fellow.

Now, how are we going to get our structural thinking reversed, so that we recognize that "two blocks plus two blocks equals four blocks" conveys and erroneous lesson? What we should do is to teach Johnny that "two plus two equals four." It is an abstract definition and it is purely arbitrary. It just happens to be the way we press the shape of our minds on these kinds of data. When we can go into this realm and we can come out with some solid conclusions I will be ready then to propagandize. But for now I feel very much less sure of myself.

QUESTION: Doctor, we occasionally see lists of the 20, 30, or 50 outstanding high schools in the country; also the colleges. For instance the examining boards classify colleges X, Y, and Z.