of presenting the research-development-diffusion-implementation model added important caveats to the effect that it was possible to begin the process at any point in the model and that it was always necessary to keep in mind the possibility that flow through it would be less than linear. See David L. Clark and Egon G. Guba, An Examination of Potential Change Roles in Education (mimeographed),

pp. 4-6, 9, and 10.)

There is a second problem with your critique, however, this one a little more serious. The assumptions which you impute to the supposed pipeline model are neither true, held by me, necessary to the model as you describe it, or present in my article as you implied they were. My belief that generally speaking it makes sense to think about the process of building a foundation of knowledge on which to build educational improvement in terms of a research-development-demonstration-implementation continuum does not entail subscription to some of the "dangerous" assumptions which you claim to abstract from the "pipeline" model. In fact, if you will re-examine the article I think you will find many passages which contrast rather sharply with the assumptions you ascribe to the model.

For example, you will find that I make clear over and over again that I am talking about improvement, not just change. You will find that I refer to the importance of teachers not only seeing demonstrations of new practices but actually trying them out, hardly the "hot-house" demonstrations you ascribe to the model. You will find that I specifically mention how little we know about the role and function of change agents in the school but that at least we are coming to the point of asking the questions. Even the opening anecdote is a refutation of the last assumption. And as for the sixth, that "assumption" is not present in any way, shape, or form in the article, and it would be foolish to claim that it is! To carry the example further is pointless; the disparity between the article and the claimed assumptions is apparent on a back-to-back reading of both.

If the assumptions are essential concomitants of a belief in the long-range effectiveness of well-conceived and balanced research and development efforts then I for one would be the first to recommend we quit our efforts right now. On the other hand, we cannot afford to spend public dollars at any level of government for "messing around." And the only real alternative to messing around is carefully planned cumulative research, well-supported development, credible demonstration, and the development of the required capabilities in the army of professionals who must know the improved practices in order to implement them.

If there is a philosophy or model expressed in the article and the laboratory program it is that simple attention to the logic of the research-developmentdemonstration-continuum will never by itself get us to any more efficient levels of instruction, learning, or education (in other words, a claim of the insufficiency of the "pipeline" model), but rather that improvement in education depends upon a process of persuasion and accommodation among different identifiable sub-

systems in education.

No one understands more fully than those of us here how difficult and complicated educational improvement is. We do not know yet how to bring about the general implementation of improved practices on a continuing basis, but we have some clues. We do not castigate anyone or find anyone reprehensible; it is hard to do so when we are all beginners in this effort. We do not believe that all good things in education now stem from research; but in the long run. if there is good, coordinated research and it is well-supported, it is likely that much of what is good in instruction will come from there.

Dialog on these matters is important among all parts of the research and education community. You reported, however, that you found it "extremely difficult to reach and talk to USOE officials about these matters." It has been found to the first contract the first talk appeared.

fourteen months since the article appeared. I have yet to hear from you!

I suppose the most disappointing aspect of your testimony is that while it bore all the signs of an act of demolition it offered little in the way of constructive suggestion. It would be foolish to deny that the school is by and large unchanged and inadequately implementing what we already know about human learning and human motivation. But models of educational change can be intellectually criticized all day long. It is a pleasant academic pastime. The problems of the schools, however, be they urban, rural, suburban, segregated. poor, advantaged, or inadequate are numerous and will not wait, and what we need are constructive suggestions which go something beyond your critique.

Let us get the issues out where they count and can be dealt with. Our job is to

help, and I am at your service in that effort.

Sincerely.