

of help you in a sense, our friends, to justify these great expenditures and these apparently useless or not immediately useful research and developmental activities. We really feel sometimes that our research on preschool kids should in some people's minds have a payoff in some kind of increase in the number of college graduates, or something like that, in the next year or so even though they are entirely different individuals of course that we are dealing with.

I did want to call your attention to a number of the things that even in the 2 or 3 years of expanded involvement in education that we at Harvard could point to, and which, in a sense, you made possible. These would include studies of mental abilities, and studies of speeded speech, where we make direct recordings useful to the blind people for learning, far more useful and far less time consuming than they have been up to now.

Mr. GIBBONS. Speeded speech? What do you mean?

Mr. HERZOG. A man could take a recording—if we were making a recording of what I am saying and what you are saying, we could, by some carefully worked out splicing of some of the sounds I make now, still permit the whole utterance to be heard and understood in less time but just as efficiently. Instead of a recording of 3 inches on a 33-r.p.m. record, a person could hear and learn from a recording of an inch and a half on the surface of the record. Does this make sense? In other words, many of the sounds we make when we speak normally are not really necessary for communication. It makes for more secure communication, but if you are listening attentively, the recording is good and the dialog is clear, you don't need all the sounds we usually use in making words. Some R. & D. centers have a number of curriculum development projects that we think are going to be producing, and have already produced, some very useful and exciting new materials. There is a new social studies curriculum, 10th, 11th, and 12th grades in Newton High School which has been supported in part by the R. & D. Center, in part by the Newton schools, which is just about finished, is in full use at Newton. Copies of samples have been sent to other schools, although full-scale dissemination has not been attempted yet.

Mr. HATHAWAY. You deal directly with the schools, is that correct, not with the Commissioner of Education?

Mr. HERZOG. The R. & D. center has a kind of autonomy. We wrote an original proposal outlining some of the sorts of things we thought we would be doing during the next 5 years. OE said, "It sounds interesting to us," and gave us a sum of money to do most of those things. But we then decide locally exactly what it is and how it shall be done on a year-to-year basis.

Each year we tell them what we think we will be doing the next year. There, frankly, seems to be less and less room for our own decision making, although this is not a crucial problem yet. But compared to the very first description and inspiration of the program, there seems to be an increasing interest by OE in exactly what it is we will be doing as opposed to the more general topical descriptions. This project came to our attention really after the center got going, but we thought that it was a very valuable one and we were able under the terms of the kind of contract we have to say, "Yes, Mr. Altree and Mr. Douglas and your