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A BASIS FOR A PRIMARY MATHEMATICS SYLLABUS

By
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NOTE: The recordings of the following two papers were unfortunately incomplete on the tapes, but in view of the importance of the subject matter, it was considered advisable to reproduce them as far as possible.

. . . Page 5 of the syllabus mentions "real experience". "It is not only the teachers, however, who are to use the apparatus. In the grades and lower standards especially, aids should be supplied to pupils who, under guidance and at the direction of the teacher, should be shown how to make the best possible use of them in order to grasp the meaning of number and to analyse the composition of the numbers within the prescribed range." This is fine until we come to the last bit—"to analyse the composition of numbers *within the prescribed range.*" There is a kind of regal, Elizabethan ring in the last words—"*the prescribed range.*"

From there on, the syllabus deteriorates. "Although there are many methods of conducting mental arithmetic lessons, the following is recommended." What on earth has mental and mechanical and problem arithmetic got to do with what I have been saying? It says, "There are many methods, *but* pupils are to work *against time*, although in the lower section of the school, the pupil should not be made to feel conscious of this." How ridiculous! How can this idiotic statement be put in print? "Pupils are to hold up their hands as soon as they have written down the answer. Sums are to be given *one at a time* and the answer to each is given by the pupils before going on to the next." This is the lock-step approach. "For practice in addition of numbers, money, weights and measures, write *one* sum on the blackboard. Change a few figures or a whole column to present the second sum and so on. Do the same for subtraction."

Reading through this, I have the impression that I have seen it all before. I think I saw it in the mines, which we visited the other day, in the instructions for the boss boys, repeated until they know them off by heart and then off they go to do a good job to get mechanical, dull, productive gold. But nobody is going to dig gold out of the minds of children with this sort of approach.

I am reminded that you need to do an awful lot of digging before you get any gold, and you have to do an awful lot of this before you are going to get any gold out of children.

Listen to this: "Average and bright pupils" (we are marking them off, you see) "should correct every mistake they make, since it will not entail much extra work," (I do not see the logic of this.) "but weaker pupils should be required to correct only as many sums as the teacher determines will be in the pupils' interest and at the same time will not cause them to lag behind in their work." If you examine that, it is so silly and stupid that I cannot ever imagine anyone allowing it to appear in print.

You have got to work up to Standard V before you are allowed to add up 999,999 and anything else—the first year you can have a little hors d'oeuvre, the second year you can have the fish, the third year . . .

The syllabus is dull and out of date. If you continue to use this syllabus with its accent on computation and speed, you will get children to think that these things really matter and then you will never have any mathematicians. With great skill, you are leading to a uniform mediocrity, and it seems to me that the challenge to you who gave up your time to come here to listen to us is to go away and put that right.