

Questions for the Considerations of such Congresses as this

D.E. Smith, *The Teaching of Mathematics in the Secondary Schools of the United States*, in *Atti del IV Congresso Internazionale dei Matematici - Roma, 6-11 aprile 1908*, ed. G. Castelnuovo, Accademia R. dei Lincei, 3 vols. Roma 1909, 476-477

And now, in closing, I should like to express the hope that these International Congresses may add to their already great value as clearing houses of thought, by sometime investigating, through committees, a few questions relating to secondary education. Countries cannot be uniform in their curricula, their school systems, nor their methods of teaching, but the influence of a Congress like this might greatly help many who are earnestly seeking to improve the teaching of mathematics. Some of the questions that might profitably be considered are the following:

1. What have been the results of attempting to remove the barrier between such topics as algebra and geometry, or to teach the two simultaneously, and are we prepared as yet to make any recommendation in this matter?

2. What have been the results of attempting to teach demonstrative geometry before algebra? If they have been favorable, what is the nature of the geometry best adapted to this apparently psychological sequence?

3. What is the opinion of impartial observers of the work of the MÉRAY geometry in France and of works like that of DE PAOLIS in Italy, as to the union of plane and solid geometry?

4. What is done in the various countries as to the union of plane geometry and trigonometry?

5. What is being done to advantage in the introduction of the elementary ideas of the calculus into the work in secondary algebra?

6. What is the safe minimum of Euclidean geometry, the calculus, and mechanics?

7. What is the safe relation to be established between secondary mathematics and physics?

8. What position should the secondary schools take with respect to the nature of applications and the relations of applied to pure mathematics?

9. What should be the relative nature of the courses in the secondary schools for those who do not intend to proceed to the universities, and for those who do intend to do so? In other words, of finishing and preparatory courses?

These questions, and others like them, are occupying the serious thought of American teachers. As we have always turned to Europe for conservative but helpful suggestions, so some of us would be glad if this Congress might deem it advisable to appoint international committees, corresponding in any of the four languages admitted to these deliberations to consider matters of this kind. An agreement is not essential, but the interchange of views and suggestions could not fail to be very helpful¹.

¹ This suggestion was carried out by the Congress, a Commission on the Teaching of Mathematics being appointed, to report in 1912.