would like to reproduce just one quotation which I found particularly interesting, from the report of Sierra Leone:

" The most important factor in our survey is that in all these areas education has been expanding very, very rapidly within the last ten years. The number of secondary schools has at least doubled in all areas and is still expanding. It is in these new schools that there is the greatest opportunity for introducing modern mathematics. The teachers in these schools are usually young enthusiasts and, the schools often being in new towns, are sufficiently separated from the older traditional schools to make it possible for experimental work to be carried out without pupils and parents continually comparing the work there with the work being done in other schools. "

6. Conclusions

It is clear from the reports that many nations have made an excellent start on the modernization of high school mathematics curricula. It is equally clear that much hard work still needs to be done.

There seems to be fairly general agreement that some basic concepts from set theory and logic should be introduced, that geometry should be modernized, that some elements of modern algebra be introduced, and that probability and statistics are suitable for high school teaching. Even more important is the general agreement that much of traditional mathematics should be taught from a modern point of view. However, as far as the details of these recommendations are concerned, there is considerable disagreement.

The two greatest difficulties blocking progress are the critical shortage of qualified teachers, and the lack of suitable text materials. The former problem has been attacked in a few countries by running special courses for high school teachers whose training was mostly traditional. The latter is being solved by the writing of many excellent experimental text materials.

I should like to conclude the report by making two specific recommendations to ICMI:

Recommendation 1. That ICMI initiate study on three problems that have arisen out of the national reports: (1) How can the teaching of applied mathematics in our high schools be modernized ? It is clear that this problem has been neglected in the past. (2) To what degree should high school mathematics be axiomatized ? There is considerable disagreement on this topic. (3) How and to what degree should probability theory be introduced ? While this is the subject most frequently recommended as a major new topic, many pedagogical questions concerning it remain to be answered.

Recommendation 2. That ICMI serve as a clearing house for experimental materials on modernizing high school mathematics. That each national subcommission should be requested to send to ICMI a list of available books and articles, with an indication of how they can be obtained, and that this list be kept up to date by ICMI and circulated to the national commissions. This could expedite planning and eliminate unnecessary duplication.

APPENDIX

Bibliography of the German report

[1] ATHEN, H., *Die Vektorrechnung als neuer Schulstoff.*
[2] —— *Vector Methods in Secondary School Geometry:*
a) Vector Spaces and Affine Geometry;
b) Vectorial Approach to Trigonometry;
c) Analytical Geometry on the Basis of School-like Vector Treatment.
[3] BAUR, A., *Moderne Tendenzen der Analytischen Geometrie im Unterricht der Deutschen Gymnasien.*
[4] FABER, K., *Bericht über Unterrichtsversuche in Abbildungsgeometrie auf der Mittelstufe.*
[5] WÄSCHE, H., *Neuere Algebra und Analysis im Oberstufenunterricht eines mathematisch-naturwissenschaftlichen Gymnasiums.*
[6] BAUR, A., *Das elektrodynamische Elementargesetz.*
[7 *a)* u. *b)*] —— *Analytische Geometrie in vektorieller Behandlung*, Teil I und II.
[8 *a)* u. *b)*] —— *Einführung in die Vektorrechnung*, III und IV.