

RAPPORT OF WORKING GROUP 3.: TECHNOLOGY'S IMPACT ON
RELATIONSHIPS BETWEEN GENERAL EDUCATION AND
EDUCATION FOR CAREERS.

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Three main points were discussed in this Commission. The first one was related to the theoretical principles governing relationships between general education and education for careers. Professor Reijo Raivola's views were especially fruitful in identifying some parallelisms between the effectif industrialisation on the spread of compulsory education, on the one hand, and the new impact of new technologies on today's educational systems on the other. Also very interesting were the views of Professor Giorgio Vuoso concerning the philosophical principles of technological education. According to him it is absolutely necessary to demystify science's claim to absolute knowledge, restructuring the philosophical principles in order to avoid the encroachment of the technological approach into the sphere of ethical values.

The second point was the analysis of several case-studies. The first one, the Netherlands, was introduced by Professor Kremers. His paper dealt with the Dutch educational system and the position of technology therein, and some underlying dilemmas which have to be faced now in the Netherlands. The impact of modern technology on Hungarian education and especially on young people's attitudes was examined by Professor Illes, pointing out the need for a new balance between general and vocational education in Hungarian curricula. Two papers were devoted to the case of Italy. Professor Lunetta addressed his paper mainly to the different characterisations of school aims in Northern and Southern Italy, both parts of the country reflecting different assumptions about the introduction of new technologies in education according to their quite different contexts. Professor Telmon's paper took account of reform perspectives in Italian secondary education. In this case the relationships between school and the labour market, on one hand, and between general and technical subject matters, on the other, seem to be particularly important. The last case-study was devoted to the Greek comprehensive, multilateral high school by Professor Cassotakis. In his opinion, this new comprehensive school could solve those

problems arising from technological evolution and facing both education and the labour market. Existing circumstances in the socio-political context insure the success of these reforms in this country.

The last point was that of comparative surveys. Professor Gomez Ocana and Professor Pérez Alonso-Geta, presented three papers, especially interesting from the point of view of the use of statistics in comparative education. Accordingly, three problems were introduced: technical subjects in secondary education curricula; assessment of technical knowledge for university admission; and curricular objectives in American high-schools and university admission exams. Another paper, by Professor Rius Lozano, also used the same methodology in comparing the impact of technology in vocational training curricula between the Soviet Union and Spain. Professor Hörner's views are very helpful in providing some comparative data concerning European experiences. His paper dealt with attempts to introduce technical education in schools in France, England, FRG, DGR, and the Soviet Union, and showed that the same phenomenon appears: although each country attempts to introduce 'Technik' in school curricula, there is a tendency for technical subjects to be marginalised or adapted in a way quite different from the original proposals and it seems to be due to a dichotomy between scientific and technical thinking. In this connection, Professor Iram showed that, in comparing the Israeli and Swiss models of vocational training, they both developed organically.

Several discussions arose from these contributions. Many of them focused on the concept of technical culture which was defined, in Professor Raivola's words, as a model of society where 'all human needs are institutionalised, and all institutions are technologised, stressing the negative aspect of this definition which was deeply analyzed. Besides this, the introduction of such a model in school systems was examined, pointing out the main problems and issues, at a national level as well as in a comparative examination, which tended to show that work/technological purposes could be seen as extremely difficult to introduce into the whole school system because of structural and contextual elements within and around it. Schools seem not to be, in the light of these analyses, the right place for a technical/vocational education to the extent that, up to present, they have proved to be unsuccessful in achieving those objectives. Despite the cultural diversity of the presentations there was remarkable identity of views on the problems and proposed solutions. Solutions that seem to be in the modification of structures rather than in curricular approaches.