

YEARS OF CHANGE IN SCIENCE EDUCATION

IN NEW SOUTH WALES, 1962 - 1973

- by -

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IN APPRECIATION

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ABSTRACT

This work is a case-study in curriculum development in secondary school science education, especially senior science, in New South Wales during the decade 1962-1972.

The situation became exceptionally complex and grew out of the reorganisation of the secondary school curriculum recommended by the so-called Wyndham Committee in 1957. A completely new concept of science was offered to students of the State when biology was given increased status beside the physical sciences - physics and chemistry. This combination of material was examined in a very special way and Science (in this broad sense) was also tied administratively to mathematics.

In 1966 a complicated syllabus was presented to students and teachers with negligible advance preparation of teachers, no period of familiarisation and no in-service support. Almost no explanation of the rationale behind such a novel and untried scheme was offered.

The response of teachers and students was initially one of stunned silence. Very quickly this developed into hostility to the content, to its serious overloading and to the restriction of practical work. Teachers, parents and some members of the Universities expressed grave misgivings not only about the suitability of the course as a preparation for tertiary studies, but also about the completely unsatisfactory nature of the texts offered, about the examination method adopted, and about the restrictions on the personal aspirations of students for some degree of specialisation in their senior studies.

The Universities became very interested in the discussions then appearing in the newspapers. Academics took sides either attacking or defending the concepts underlying the course; their points of view being based largely on the performance of the students at university level.

The campaign for change began with a band of very vocal teachers working through the Teachers' Federation. These were supported by academics in promoting a series of public meetings. Parallel to this a campaign spearheaded by Professor Alexander of Sydney University was initiated in the Press. The defence of the new courses was taken up by Professors Messel and Butler of the same University. To maintain the impetus for the change in curriculum, the Secondary Schools Science Association was formed by persons interested and very involved in the curriculum.

Intricately woven into the pattern of discontent with and strenuous defence of the Wyndham courses, among teachers there was a groundswell of positive aspirations towards the understanding of and clarification of the aims of science teaching in New South Wales. This resulted in the preparation of a document which contained guidelines for both teaching and curriculum development: it was subsequently adopted by the Board of Senior School Studies.

This same Board was, by then, very much aware of the discontent with the new courses and various modifications of them were considered. Attempts to accommodate teacher, student and university aspirations resulted in firstly the appointment of Curriculum Development Officers to assist the Science Syllabus Committee and, parallel to this, a willingness to permit trial of science courses which had been developed for use in the United States of America and in other states of Australia.

Once the decision was made in December, 1969 to permit the trialling of other courses, a Committee was set up to evaluate these courses as well as the existing Wyndham courses. This Committee reported favourably on the new courses and after some false starts the Board of Senior School Studies not only extended the trials of the new courses, but in 1975 the old Wyndham courses were abolished and superseded.

Complications arising from the personalities involved, from people with vested interests in certain educational theories, from the authors of the specially published texts, from the Publishing Houses which were to provide the new texts became very tangled indeed. Similar difficulties were encountered by the Curriculum Development Officers who later directed the adoption of the new courses to a conclusion satisfactory to the Science Syllabus Committee and the Board of Senior School Studies.

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