

SYMPAB - (16747) - JOHN GILBERT'S CONTRIBUTION TO CHEMICAL EDUCATION: SEEKING CONNECTIONS AND COHERENCE

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Short Abstract

A cursory review of John Gilbert's contributions to science education research will demonstrate that he was an initiator of many research methods that were put into practice in science lessons. Examples include specially designed interviews to probe students' thinking about science concepts, a consideration of how these student ideas should be taken into account in designing curriculum and teaching, and the need to develop typologies to understand students' explanations of science concepts.

My focus in this presentation is about his creative thinking and insights into chemistry education. John was a wonderful collaborator with a keen eye to recognise those with complimentary scholarship. Above all, he constantly sought connections and coherency of chemical ideas involving chemical literacy and pedagogy across wide domains of formal and informal schooling. It was within this broad vision that *Chemical Education: Towards Research-based Practice* (Gilbert, de Jong, Justi, Treagust, & van Driel, 2003) was published and which the editors celebrated together at the 2003 European Science Education Research Association meeting in the Netherlands. At the time, there were no books on chemistry education research that brought together the current international research under one cover. John's plan was to invite the then major contributors to the field as well as the editors and, for most chapters, to have more than one author to promote the degree of creative tension among them. This Kluwer published book was based on the relationship of chemistry and chemical education, the curriculum in chemistry in all levels of education, how topics are taught to the best advantage of learners, and for the professional development of all those associated with chemical education.